

STUDY OF HEALTH SERVICES
FOR CANADIAN INDIANS

DEPARTMENT OF NATIONAL HEALTH AND WELFARE
OTTAWA, CANADA

BOOZ · ALLEN & HAMILTON

BOOZ • ALLEN & HAMILTON CANADA Ltd.

Management Consultants

BOX 127
TORONTO DOMINION BANK TOWER
TORONTO-DOMINION CENTRE
TORONTO 1, ONTARIO
363-2112
AREA CODE 416

September 24, 1969

The Honourable John Munro
Minister of National Health
and Welfare
Ottawa, Canada

Dear Mr. Munro:

Booz, Allen & Hamilton Canada, Ltd. is pleased to submit this report of a study of health services for Canadian Indians. The study was conducted in accordance with our proposal letter of February 20, 1969 and the contract with the Department of National Health and Welfare dated March 7, 1969.

The country's present concern for the welfare and progress of its native people and the growing commitment to improve the conditions in which many Indians live make the submission of this report most timely and should provide the proper atmosphere for the implementation of its recommendations.

With the implementation of the high priority recommendations made in this report, the Department of National Health and Welfare has the opportunity to be in the vanguard of developing a pluralistic, co-operative approach to all Indian problems. Such an approach will increase the effectiveness with which the parties involved are able to provide services to the Indian people. This approach will more effectively marshal the nation's resources to eliminate fragmentation of services to Indians and to make it possible for the native people to share more fully in the benefits of society.

1. ORGANIZATION OF THE REPORT

The report consists of five chapters, as follows:

- Chapter I - Health Services and the Indian People
- Chapter II - The Health Status of Indians
- Chapter III - The Health Resources Available to Indians
- Chapter IV - Recommendations for the Improvement
of Indian Health Services
- Chapter V - Plan of Action

Two appendices are also included in the report. Appendix A provides a summary of the types and numbers of interviews conducted and the kinds of reports and documents reviewed. Health services provided in the Indian communities visited in the Middle North are reviewed in Appendix B.

2. SCHEDULE AND APPROACH TO THE WORK

Work began on March 7, 1969 with the first Monitoring Committee meeting. Other meetings to review significant work progress were held with the committee on April 3, May 21, and June 20, 1969. A final meeting to review the draft report was held on July 15, 1969.

During the course of the study, monthly letters to the committee reviewed the tasks undertaken during the previous month. Reference should be made to these letters, dated April 3, May 6, and June 6, 1969, and to Appendix A for details of the interviews conducted and the approach to the work. A summary work plan, which was reviewed with the Monitoring Committee and which served as the basic schedule of work throughout the study, can be found attached to the letter of April 3, 1969.

The major objective of the study was to evaluate the health status of Indians and the health services available to them and to recommend improvements in those services. Because information about conditions that are unique to the Middle North sample area was not readily available, considerable reliance was placed on interviewing and observation in the gathering of data. Field visits were made to 39 communities in the Middle North and to 8 reserves in southern areas. Sites of the visits are listed in Appendix A. The field visits provided the opportunity to observe conditions at the point of the delivery of health services and to interview large numbers of native people and the field personnel who provide health and other services to Indians.

The interviews with native people in their home communities and with band, provincial, and national leaders of the Indian people were also important to obtaining their good will on behalf of the department and to gain the insights of the most important group involved in a health services delivery system - the consumers themselves.

Because the health problems of the Indians are but a part of a much broader and interrelated complex of problems, extensive interviews were also conducted among governmental and private organizations, both within and outside of the health field.

The severe time constraints of the study made it necessary to concentrate efforts upon the derivation of high priority objectives and recommendations. Certain recommendations must await more detailed analysis than the four months of this study would allow, particularly in such technical areas as communications. Separate studies are being undertaken in co-operation with the Department of Communications, and it is hoped that they will provide useful suggestions for improvement in this important area.

In areas such as finance, sufficient data were not readily available to conduct detailed analyses. With the financial data available, however, it was possible to make what are believed to be sound cost estimates, consistent with the purposes and objectives of the study.

T A B L E O F C O N T E N T S

Page Number

LETTER OF TRANSMITTAL

I.	HEALTH SERVICES AND THE INDIAN PEOPLE	1
II.	THE HEALTH STATUS OF INDIANS	19
III.	THE HEALTH RESOURCES AVAILABLE TO INDIANS	55
IV.	RECOMMENDATIONS FOR THE IMPROVEMENT OF INDIAN HEALTH SERVICES	119
V.	PLAN OF ACTION	198

APPENDICES

INDEX OF EXHIBITS

	Following <u>Page</u>
I. DISTRIBUTION OF THE REGISTERED INDIAN AND TOTAL CANADIAN POPULATION BY PROVINCE - DECEMBER 31, 1966	9
II. AGE-SEX RATIOS OF THE REGISTERED INDIAN POPULATION AND OF THE TOTAL CANADIAN POPULATION - DECEMBER 31, 1966	11
III. HISTORICAL GROWTH TREND OF THE REGISTERED INDIAN POPULATION - 1939-1968	11
IV. HISTORICAL GROWTH TREND OF THE TOTAL CANADIAN POPULATION - 1939-1968	11
V. AVERAGE COMPOUND ANNUAL RATE OF INCREASE OF THE REGISTERED INDIAN POPULATION BY PROVINCE - 1963-1968	12
VI. FOUR-YEAR AVERAGE BIRTH RATES, DEATH RATES, AND NATURAL INCREASE OF THE TOTAL CANADIAN AND OF THE REGISTERED INDIAN POPULATION BY PROVINCE - 1964-1967	12
VII. PROJECTED REGISTERED INDIAN POPULATION - 1969-1988	13

	<u>Following Page</u>
VIII. BOUNDARIES OF THE MIDDLE NORTH	15
IX. PROJECTION OF REGISTERED INDIAN POPULATION IN THE MIDDLE NORTH - 1968-1988	16
X. PROJECTION OF OTHER THAN REGIS- TERED INDIAN POPULATION IN THE MIDDLE NORTH - 1968-1988	17
XI. PROJECTION OF TOTAL POPULATION IN THE MIDDLE NORTH - 1968-1988	18
XII. CRUDE DEATH RATE OF REGISTERED INDIANS AND OF ALL CANADIANS - 1956-1967	21
XIII. AVERAGE AGE AT DEATH OF REGISTERED INDIANS AND OF ALL CANADIANS - 1963-1967	21
XIV. LIFE EXPECTANCY AT BIRTH OF REGISTERED INDIANS AND OF ALL CANADIANS - 1963-1966	22
XV. COMPARISON OF MORTALITY RATES OF REGISTERED INDIANS AND OF ALL CANADIANS, BY AGE AND SEX - 1966	23
XVI. MORTALITY OF REGISTERED INDIANS AND OTHER CANADIANS IN SASKATCHEWAN BY AGE - 1967	24
XVII. INFANT MORTALITY RATES OF REGISTERED INDIANS AND OF OTHER CANADIANS - 1956-1967	25
XVIII. DEATH RATES OF REGISTERED INDIANS (EXCLUDING THOSE IN ONTARIO) AND OF ALL CANADIANS, BY MAJOR CATEGORIES OF CAUSE OF DEATH - 1963	25

XIX.	SIGNIFICANT DIFFERENCES IN CAUSES OF DEATH OF REGISTERED INDIANS (EXCLUDING THOSE IN ONTARIO) AND OF ALL CANADIANS, BY MAJOR DISEASE CATEGORIES - 1963	26
XX.	PERCENTAGE OF DEATHS FROM VARIOUS CAUSES AMONG REGISTERED INDIANS IN SASKATCHEWAN - 1967	27
XXI.	HOSPITALIZATION OF REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	32
XXII.	HOSPITALIZATION OF REGISTERED INDIANS AND OTHER CANADIANS, BY MAJOR DIAGNOSTIC GROUPS, BRITISH COLUMBIA - 1967 AND SASKATCHEWAN - 1966	32
XXIII.	HOSPITALIZATION FOR RESPIRATORY DISEASES AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	33
XXIV.	HOSPITALIZATION FOR ACCIDENTS AND VIOLENCE AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	33
XXV.	HOSPITALIZATION FOR DELIVERIES AND COMPLICATIONS OF PREGNANCY AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	34

XXVI.	HOSPITALIZATION FOR DISEASES OF THE DIGESTIVE SYSTEM AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963 - 1967) AND SASKATCHEWAN (1963-1966)	35
XXVII.	HOSPITALIZATION FOR DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	36
XXVIII.	HOSPITALIZATION FOR DISEASES OF THE SKIN AND CELLULAR TISSUES AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	36
XXIX.	HOSPITALIZATION FOR INFECTIVE AND PARASITIC DISEASES AMONG REGISTERED INDIANS AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)	37
XXX.	AVERAGE LENGTH OF STAY IN HOSPITAL BY MAJOR DIAGNOSTIC GROUPS FOR REGISTERED INDIANS AND OTHER CANADIANS - BRITISH COLUMBIA - 1967	38
XXXI.	PERCENT OF AVAILABILITY OF BASIC AMENITIES IN THE HOMES OF REGISTERED INDIANS AND CANADIANS - 1966	42
XXXII.	PHYSICAL IMPROVEMENTS PROGRAM OF THE INDIAN AFFAIRS BRANCH - 1966-1967 AND 1967-1968	46
XXXIII.	HEAD OFFICE ORGANIZATION OF THE MEDICAL SERVICES BRANCH	71

XXXIV.	DISTRIBUTION OF FEDERAL PHYSICIANS PROVIDING MEDICAL CARE TO REGISTERED INDIANS, BY LOCATION AND TYPE OF SERVICE - MARCH 1969	77
XXXV.	DISTRIBUTION OF FEDERAL NURSES PROVIDING CARE FOR REGISTERED INDIANS, BY LOCATION AND TYPE OF SERVICE - APRIL 1969	78
XXXVI.	DISTRIBUTION OF COMMUNITY HEALTH WORKERS, COMMUNITY AIDES, AND LAY DISPENSERS PROVIDING CARE FOR REGISTERED INDIANS, BY LOCATION - 1969	79
XXXVII.	COMPARISON OF STARTING SALARIES OF FEDERAL NURSES WITH PROVINCIAL SALARY RATES - 1969	84
XXXVIII.	AREAS OF POSSIBLE ECONOMIC DEVELOPMENT IN THE MIDDLE NORTH	86
XXXIX.	SIZE AND LOCATION OF MEDICAL SERVICES BRANCH INDIAN HOSPITALS, EXCLUDING THOSE IN THE NORTHERN REGION	97
XL.	LOCATION OF MEDICAL SERVICES BRANCH CLINICS, EXCLUDING THOSE IN THE NORTHERN REGION	98
XLI.	LOCATION OF EXISTING AND PLANNED MEDICAL SERVICES BRANCH NURSING STATIONS, EXCLUDING THOSE IN THE NORTHERN REGION	98
XLII.	LOCATION OF MEDICAL SERVICES BRANCH HEALTH CENTRES, EXCLUDING THOSE IN THE NORTHERN REGION	100

		<u>Following Page</u>
XLIII.	LOCATION OF MEDICAL SERVICES BRANCH HEALTH STATIONS, EXCLUDING THOSE IN THE NORTHERN REGION	100
XLIV.	PROJECTED ROAD DEVELOPMENT IN THE MIDDLE NORTH	109
XLV.	ANNUAL MEDICAL SERVICES BRANCH EXPENDITURES ON INDIAN HEALTH SERVICES FISCAL YEARS 1966-1967 THROUGH 1968-1969	111
XLVI.	SUGGESTED STATEMENT OF HIGH PRIORITY OBJECTIVES AND GOALS FOR THE IMPROVEMENT OF INDIAN HEALTH SERVICES	123
XLVII.	ESTIMATED COST OF IMPLEMENTING THE RECOMMENDED HEALTH CARE DELIVERY SYSTEM IN THE MIDDLE NORTH	188
XLVIII.	PLAN OF ACTION	202
XLIX.	ARRANGEMENT OF PLAN OF ACTION BY GROUP ASSIGNMENTS OF PRIMARY RESPONSIBILITY FOR EXECUTION	203

I N D E X O F A P P E N D I C E S

Appendix

DOCUMENTS UTILIZED AND INTERVIEWS
CONDUCTED DURING THE STUDY

A

HEALTH SERVICES IN INDIAN COMMUNITIES
IN THE MIDDLE NORTH

B

Alberta	B (1)
Manitoba	B (7)
Ontario	B (17)
Saskatchewan	B (21)

I. HEALTH SERVICES AND THE INDIAN PEOPLE

STUDY OF HEALTH SERVICES
FOR CANADIAN INDIANS

Department of National Health and Welfare
Ottawa, Canada

This report is a reproduction of a study
conducted by Booz • Allen & Hamilton
Canada Ltd. of health services for
Canadian Indians.

September, 1969

Program Aids and Resources
Medical Services Branch
Information et appui aux programmes
Direction générale des services médicaux

3. TEAM MEMBERS AND SPECIAL CONSULTANTS

The following individuals comprised the consulting team that participated in the study:

Consulting Team Directors:

Frank W. Judge	Executive Vice President Booz, Allen & Hamilton Canada, Ltd.
Robert A. Tschetter	Vice President Health and Medical Division Booz, Allen & Hamilton Inc.
Roy F. Perkins, M.D.	Associate Health and Medical Division Booz, Allen & Hamilton Inc.

Advisory Panel:

Lester Breslow, M.D.	Professor of Preventive Medicine University of California Member of Booz, Allen & Hamilton International Health Advisory Council
Charles C. Edwards, M.D.	Vice President Health and Medical Division Booz, Allen & Hamilton Inc.
H. Lawrence Wilsey	Vice President and Managing Officer Institutional Management Group Booz, Allen & Hamilton Inc.

Consulting Team Co-ordinators:

Carl G. Burness	Vice President Booz, Allen & Hamilton International
John M. Collins	Consultant Health and Medical Division Booz, Allen & Hamilton Inc.

Consultants:

Roy A. Chefets	Consultant Booz, Allen & Hamilton Canada, Ltd.
William E. Corley	Consultant Health and Medical Division Booz, Allen & Hamilton Inc.
J. Guy Dumas	Consultant School Administration Division Booz, Allen & Hamilton Inc.
William A. Hunter	Associate Booz, Allen & Hamilton Canada, Ltd.
Brian A. Johnson	Consultant Booz, Allen & Hamilton Canada, Ltd.

In addition, the advice and counsel of the firm's International Health Advisory Council were utilized. Along with Dr. Breslow, who served on the Advisory Panel for the study, the members of the council are:

Ray E. Brown	Executive Vice President Affiliated Hospitals Center Boston, Massachusetts
Lowell T. Coggeshall, M.D.	Chairman Booz, Allen & Hamilton International Health Advisory Council
George James, M.D.	President and Dean Mt. Sinai Medical Center New York
Walter J. McNerney	President Blue Cross Association

4. MAJOR CONCLUSIONS AND RECOMMENDATIONS

Efforts to provide health services to Indians, particularly to those living in the relatively isolated areas of the Middle North, encounter the severe problems of urban depressed areas in unique combination with the problems faced in depressed rural areas. The depressed areas of the central cities are characterized by overcrowding, poor environmental conditions, concentrations of minority groups, and cultural and educational deprivation. Depressed rural communities face isolation from economic development, severe shortages of medical and health manpower, poor access to health care resources, lack of mobility, and other difficulties in delivering health services to sparse population groups. All of these problems were observed to be prevalent in registered Indian communities in isolated areas of the Middle North, and many were found to exist in less isolated areas as well.

There is great challenge in the effort to overcome or alleviate these problems in the improvement of the health status of Indians and the health services available to them. The wide scope of the task must constantly be borne in mind if realistic solutions are to be achieved. The health problems of Indians stem from a complex of interrelated social, economic, environmental, and health service problems.

The question of whether Indian people receive health services equal to those which might be anticipated by other Canadians living in comparable communities or in disadvantaged areas in the Middle North is not fully answerable. Indians and non-Indians in the Middle North do not all live in comparable circumstances, even within the same settlements. Nevertheless, it is believed that, in a given location, registered Indians have available to them health services that are generally equal to those available to other Canadians residing in the same area. However, since the majority of Indians generally live in the more isolated areas of the Middle North while the majority of other Canadians tend to live in less isolated areas, the difficulties of providing health services under conditions of relative isolation affect the Indian population more than the non-Indian population in the Middle North.

More important than the comparability of health services, however, is the present health status of the native people. This report demonstrates that the health of Indians is not equal to that enjoyed by other Canadians. The task at hand is to devise programs that will narrow the difference. One of the primary causes of the poor health of Indians was concluded to be the substandard conditions in which many of them live. Programs intended to bring about an improvement in Indian health should therefore include unified social, economic, environmental, and health service components in recognition of the complex nature of Indian problems.

While the problems facing native people are broad in scope and highly interrelated, there is today a less than co-ordinated and comprehensive approach to their resolution. Responsibility for Indian health and socioeconomic development programs is divided principally between two federal departments. Several other agencies also operate programs of economic development. This fragmentation of approach is the target of one of the report's major recommendations -

An independent central agency should be established in the federal government structure which would have basic responsibility for co-ordination and leadership.

The central agency should not operate programs but should view the problems of Indians in their totality, establish priorities, and exercise leadership and influence in the development of a co-ordinated and comprehensive approach to the solution of these problems. To be effective, such an agency should be located at a high level in the government organization, perhaps as an office of the Prime Minister. This recommendation will require interpretation in the light of the new government policy announced by the Minister of Indian Affairs and Northern Development. It appears, however, that the central agency could serve as an effective mechanism for overseeing and co-ordinating the transfer of federal Indian services, including health, to the provinces.

At present, there is also a less than total effort to provide comprehensive health services to Indians. This may stem in part from the frustration of realizing that, in the absence of improved environmental and economic conditions, the provision of excellent health services will achieve few, if any, lasting results. The problem also results from ambiguity in the definition of the federal government's responsibility for providing health services to Indians. The absence of a clear definition of a specific range of services for which the Medical Services Branch is responsible has made it difficult to develop overall policies and objectives. As a result, programs have been regarded as interim arrangements to meet the health needs of Indians as they arose. To counter this tendency, the following recommendation is made -

The question of responsibility and the related question of treaty rights should be resolved as quickly as possible. Consistent with the objective of bringing Indians into the mainstream of society, Indian health services should eventually become a provincial responsibility, and a target date of ten years should be established to achieve this transfer of responsibility.

The management functions of planning, establishing objectives, and controlling and evaluating operations have not been practised effectively in the Medical Services Branch. These functions are particularly important in a decentralized organization, since the

regions require clear statements of policy under which to operate. In addition, the functions, authority, and responsibility of most senior officers in the branch have not been clearly defined. Improvements in management functions, such as those recommended in this report and in previous studies for the Medical Services Branch, need to be made.

The present lack of Indian participation in the planning and operation of health services greatly limits program effectiveness.

Therefore -

Extensive use should be made of the community development approach, including training and employing more native personnel and encouraging the Indian people to begin assuming responsibility for their health services. Ultimately, Indian communities should exercise the same responsibilities for their health services as those assumed by other communities.

The concept upon which the health services delivery system has been structured is sound, but problems exist in several important areas of implementation. The most notable is the severe shortage of professional manpower. Several recommendations appear to offer significant opportunity for improvement. Particular emphasis should be placed on developing formal agreements for the provision of professional medical personnel to Indian communities by universities and professional associations.

The attitudes of many of the people who provide and direct Indian health services appear to contribute to the limitations in program effectiveness. In the administrative levels of the organization, there is often insufficient sensitivity to native people and their broad range of human problems. Personnel in the field generally are dedicated and sympathetic to the Indian people, but many tend inadvertently to approach them in a condescending manner. This problem appears in part to be intrinsic to the differences that exist in the cultural, economic, and educational levels of the providers and consumers of the services. A type of "we-they" relationship naturally develops. To improve the sensitivity of branch personnel to the Indian people -

Branch personnel should undergo much more intensive orientation and significantly increased numbers of native health personnel should be employed.

A third major limitation in the operation of health service programs has been an insufficient emphasis in the field on public health programs. In many cases, field nurses have no training and/or interest in public health, and some find treatment, as opposed to prevention, a more tangible and attractive type of work. The shortage of nurses and the resulting constraints on the time that field nurses have to devote to public health programs further contributes to the lack of emphasis observed. Therefore -

Considerably more emphasis should be placed on public health programs, and these programs should be more closely supervised to ensure that they are carried out effectively.

Inadequate communication and transportation systems present serious problems to the delivery of health services. It is essential that Indians in isolated situations have full-time access to health services in the event of emergencies. This requires a 24-hour, 7-days-a-week communication system and year-around availability of a means of evacuation.

Where radios must be used -

Several channels should be available as a protection against a temporary blackout on one channel because of atmospheric conditions. Radios should have a range of 300 to 350 miles.

In isolated communities that do not have all-weather air strips -

A standby plan, probably involving the use of helicopters, should be developed for evacuation during freeze-up and break-up periods.

No specific recommendations are made in the area of mental health. While considerable despondency and depression among Indians was observed on field trips, it is likely that the best solution to these problems lies in the betterment of social, economic, educational, and environmental conditions, rather than specific mental health programs.

Consideration of the organization of the Medical Services Branch was beyond the scope of this project, but it is believed that the possibilities of identifying opportunities for improvement merit further study.

The Indian health program is in particular need of increased organizational focus. The relationship of the Indian health services program to other health programs of the Medical Services Branch needs to be studied as well.

With the decision to work towards the improvement of Indian health services, the department has undertaken a challenging task, the significance of which goes far beyond health delivery systems to affect the whole of Indian life. The health needs of the Indian people are inseparably related to other aspects of the quality of life - housing, sanitation, education, and employment. Among the goals included in plans to improve health status of Indians must be concurrent progress in these other areas. The present climate of concern for the general welfare of the Indians and a growing awareness of the interrelationship of all aspects of Indian life make efforts for improvement most timely and bode well for the outcome of the tasks identified in this report.

The implementation of the recommendations for the improvement of Indian health services set forth in the attached report should contribute significantly to the health of the Indian people. Dynamic leadership and sound management will be required to implement the recommendations. We urge considerable personal involvement on your part and recommend that an individual from your office provide executive

direction to ensure that the recommendations are reviewed, evaluated and implemented.

We appreciate this opportunity to serve the Department of National Health and Welfare.

Very truly yours,

Booy. Allen & Hamilton.

I. HEALTH SERVICES AND THE INDIAN PEOPLE

Recent decades have seen the growth of a national commitment to the progress and welfare of the Indians, and the nation is increasingly concerned that the native people share more fully in the benefits and responsibilities of society. Adding impetus to this commitment of government and the general public are the articulate and effective Indian leaders who have emerged to demand not only improvement of conditions, but a voice in the selection and implementation of programs that affect the lives of their people.

It is within this climate that attention is being focused upon the health of the Indian people and upon the health services available to them. The good health of the Indians is recognized as essential to their progress and welfare. Beyond such considerations, good health, vital to the personal well-being of individuals, merits urgent attention in its own right.

The high rates of death and serious illness among many Indians indicate that the present concern for their health is well justified and that efforts to improve the health care delivered to Indians are of foremost importance. The Department of National Health and Welfare,

in its efforts to bring the health of the Indian people to a level consistent with that of the rest of the population, has undertaken to plan for the improvement of the health care provided to registered Indians on reserves. The present study and its recommendations are a part of that effort.

Indians who have merged into the general population and those living on reserves in communities near population centres typically have access to conventional resources of health care. Generally, their need for health care support from the federal government has been limited to financial assistance in utilizing conventional resources. While the health care problems which these Indians encounter are no less urgent, they tend to be similar to those of other Canadians of similar circumstance and do not require unique attention.

It is the Indian population living in relatively isolated areas such as the Middle North, where conventional health care resources often do not exist, that presents unique problems for health care delivery. Remote Indian communities are affected by the same kinds of problems faced by depressed areas of the inner cities - overcrowding, poor environmental conditions, concentrations of minority groups, and cultural and educational deprivation.

Like depressed rural communities, Indian communities observed are characterized by isolation from economic development, severe shortages of medical and health manpower, poor access to health care resources, lack of mobility, and other problems of delivering health services to sparse population groups.

This combination of the severe problems faced in both urban and rural depressed areas makes the provision of health care to Indians in the Middle North a difficult challenge, but the very existence of that challenge makes the need for efforts to improve conditions the more urgent.

The Middle North has been singled out for particular attention in this study. There, a large proportion of the population is Indian and the health delivery system is most unlike that of the rest of the country, with the federal government heavily involved in the direct provision of health services. The study does not include consideration of Indian health and health services in the Yukon and Northwest territories.

This chapter presents a brief history of the role of the federal government in the provision of health services to the Indians and considers the size and distribution of the Indian population - factors that will influence future demand for health services among the Indian people and that will have pertinence to decisions about the provision of such health care services.

1. THE DELIVERY OF HEALTH CARE SERVICES TO INDIANS
CONTINUES TO BE A CONCERN OF THE FEDERAL
GOVERNMENT

The federal government has been the major provider of health services to registered Canadian Indians. The term Indian, as used in this chapter and throughout the report, refers to registered Indians or those who are entitled to be so registered; that is, to all persons descended in the male line from an ancestor of Indian identity.

In some instances, health care has been provided through formal or informal co-operation between federal and provincial governments. However, in Indian communities that are remote from population centres where other health care resources exist, the federal government often has been the sole provider of Indian health services.

Existing legislation regarding Indian affairs has not specifically delegated responsibility for the provision of health care for Indians on reserves and crown land to any governmental body. In the absence of such legislation, the federal government has come to provide direct service where health needs arise and little or no health care is available to Indians from other sources. Therefore, the federal role has been regarded as one of providing temporary and interim health care arrangements for Indians.

- (1) The Federal Government Has Been Providing Health Services to Indians Since 1880. In 1945, Responsibility for These Services Was Assumed by the Department of National Health and Welfare

Little medical assistance was available to the Indians before 1880, when the federal government began providing health services. In early Canadian history, there was little meaningful communication between Indians and the rest of the population and the Indians remained virtually a separate group. They were not exposed to others' concepts of health needs and did not come in contact with new methods for the prevention and treatment of disease. For the most part, they continued to rely on the medical practices their own cultures had developed. The only medical aid from non-Indians was provided through unofficial channels by missionaries, military physicians, and sympathetic neighbors.

Indian treaties, signed at a time when there was little awareness of the need for health services, do not effectively delegate responsibility for the provision of health care to the Indian people. With the exception of Treaty Number 6, signed in 1876, none made specific reference to the subject of health. Treaty Number 6 merely states, "A medicine chest shall be kept at the house of each Indian agent for the use and benefit of the Indians at the direction of such agent."

Within four years of the signing of the treaty, when the Department of Indian Affairs was formed, the first part-time physicians were appointed to provide care for the Indians of eastern Canada. The federal government began providing medical care because no other authority had sufficient resources to extend care to Indians and because only agents of the federal government had lawful access to the reserves.

Federal involvement in Indian health service continued to expand and, in 1905, a Medical Services Section was formed within the Department of Indian Affairs to organize a medical program for Indians. In the same year, the federal government began building hospitals and other facilities for Indians.

In 1910, the Medical Services Section was abolished and was not re-established until 1927. In the intervening years, the first travelling field nurses were employed to educate Indians in better methods of personal hygiene and child care.

The federal role in providing health care to Indians began to increase rapidly in 1927 with the re-establishment of the Medical Services Section in the Department of Indian

Affairs. The problem of tuberculosis control among Indians became a primary concern of the section for several decades. The section increased greatly in personnel and facilities to meet the growing demand for health care to Indians.

Responsibility for Indian health services was transferred to the Department of National Health and Welfare in 1945. Other programs for Indians, including housing, education, welfare, sanitation, and most aspects of community health, remained the responsibilities of the Indian Affairs Branch.

The transfer of responsibility for Indian health services was made to enable the federal government to organize all its health activities under one minister.

- (2) It Is the Objective of the Department of National Health and Welfare To Ensure That Indians on Reserves Receive Health Services Consistent with Those Received by Other Canadians in Similar Communities

The delivery of health care to Indians has evolved as a system that is, in some respects, separate from the health care system serving the rest of the country. Where health services of conventional sources have been unavailable or inaccessible, the federal government has provided direct service to Indians to meet particular health needs as they

arose. The fact that many Indians live on reserves that are geographically remote from other health authorities presents questions of legal responsibility that have further contributed to the development of a separate health care system for Indians.

It is the objective of the Department of National Health and Welfare, which has administrative responsibility for all federal government health activities, to ensure that the health care services provided to Indians are of a quality that is similar to those received by other Canadians living in similar communities. To this end, the department is taking action to assess the health status of Indians on reserves in comparison with that of other Canadians and to plan for the provision of improved health services to meet the health needs of the Indian population. Particular attention is being given in these efforts to the area of the Middle North. It is in this area that direct provision of health services by the federal government is most prevalent, and it is there that the difficulties of providing health care to Indians are most severe.

2. FUTURE NEED FOR INDIAN HEALTH SERVICES WILL BE SHAPED BY THE GROWTH AND GEOGRAPHIC DISTRIBUTION OF THE REGISTERED INDIAN POPULATION

The great majority of Canadian Indians live on reserves and crown land and the need for Indian health services will continue to be concentrated in these areas. The anticipated 75% increase of the Indian population in the next 20 years will bring about a greatly increased need for Indian health services.

(1) Registered Indians Comprise 1.1% of the Total Population and More than 80% of Them Live on Reserves or Crown Land

In 1966, the total registered Indian population, as shown in Exhibit I, following this page, was 225,272, or 1.1% of the total Canadian population of 20,014,900. All persons who are descended in the male line from an ancestor of Indian identity and who have chosen to remain under Indian legislation are regarded as registered Indians.

Provinces with the highest proportion of Indian population in relation to total provincial population are Manitoba and Saskatchewan, where approximately 3.3% of the population is Indian. This is three times the national average.

EXHIBIT I
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**DISTRIBUTION OF THE REGISTERED INDIAN AND
TOTAL CANADIAN POPULATION BY PROVINCE**
December 31, 1966

Province	Provincial Population	Registered Indians							
		Number	Percentage of Provincial Population	Number and Percentage on Reserves		Number and Percentage on Crown Land		Number and Percentage off Reserves	
				Number	Percent	Number	Percent	Number	Percent
Prince Edward Island	108,500	402	0.4%	254	63.6%	0	- %	148	36.8%
Nova Scotia	756,000	4,201	0.6	3,112	74.0	0	-	1,089	26.0
New Brunswick	616,800	3,930	0.6	3,078	78.4	0	-	852	21.6
Quebec	5,780,800	23,102	0.4	12,137	52.5	6,581	28.5	4,384	19.0
Ontario	6,960,900	52,789	0.8	33,421	63.4	3,396	6.4	15,972	30.2
Eastern Provinces	14,716,400*	84,424	0.6%	52,002	61.5%	9,977	11.8%	22,445	26.7%
Manitoba	963,100	31,264	3.2%	24,663	78.9%	2,305	7.4%	4,296	13.7%
Saskatchewan	955,400	31,556	3.3	25,403	80.6	1,744	5.4	4,409	14.0
Alberta	1,463,200	25,523	1.7	21,248	83.5	1,465	5.5	2,810	11.0
Prairie Provinces	3,381,700	88,343	2.6%	71,314	80.8%	5,514	6.2%	11,515	13.0%
British Columbia	1,873,700	44,400	2.4%	35,232	79.4%	416	0.9%	8,752	19.7%
Yukon	14,400	2,348	16.3	49	2.1	1,481	63.1	816	34.8
West Coast Provinces	1,888,100	46,748	2.5%	35,281	75.5%	1,897	4.0%	9,568	20.5%
Northwest Territories	28,700	5,757	20.1%	57	1.0%	5,467	94.9%	233	4.1%
Total Canada	20,014,900*	225,272	1.1%	158,654	70.4%	22,855	10.1%	43,761	19.5%

* Includes province of Newfoundland, population 493,400

Sources: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Dominion Bureau of Statistics
Medical Services Branch, Department of National Health and Welfare

In 1966, the registered Indian population was distributed through geographic areas in the following proportions:

. British Columbia	- 20%
. Prairie Provinces	- 39%
. Ontario	- 23%
. Remaining Eastern Provinces	- 14%
. Yukon	- 4%

Exhibit I also indicates that more than 80% of Indians reside on reserves or crown land. As of March 31, 1967, the registered Indian population was grouped into 558 bands occupying 2,274 reserves. At that time, the reserves had a combined area of 6,000,735 acres.

While slightly less than 20% of the total registered Indian population does not live on reserves or crown lands, the proportion is only half as large in the Prairie Provinces (13.0%) as it is in the Eastern Provinces (26.7%), as shown in Exhibit I.

(2) The Registered Indian Population Is Younger than the Total Canadian Population and Is Expected To Continue Growing at a Faster Rate

The Indian population has grown at a faster rate than the total Canadian population. This growth is expected to continue, although the proportion of the Indian population to the total population will not change significantly.

The registered Indian population is younger than the total Canadian population and has a higher ratio of males to females, as indicated in Exhibit II, following this page. Over 56% of the Indians are under 20 years of age, as compared to 42% for all Canadians.

The ratio of males to females is significantly higher in the Indian population. This difference is due in part to the large number of Indian females who marry non-Indians and are thereby removed from the registered Indian count. Despite this difference in sex ratios, the high proportion of persons of child-bearing age among Indians can be expected to contribute to the continued growth of the population.

During the past nine years, the Indian population has grown at a rate approximately 1.7 times that of the total Canadian population, as indicated in Exhibits III and IV, following Exhibit II. For the period 1959-1968, the annual compound rate of growth in the Indian population was 3.18%, compared to 1.87% for the total population.

The growth rate of 2.43% for the Indian population over the full period 1939-1968 is considerably less than the 3.18% rate of the past nine years. This is due primarily to the high

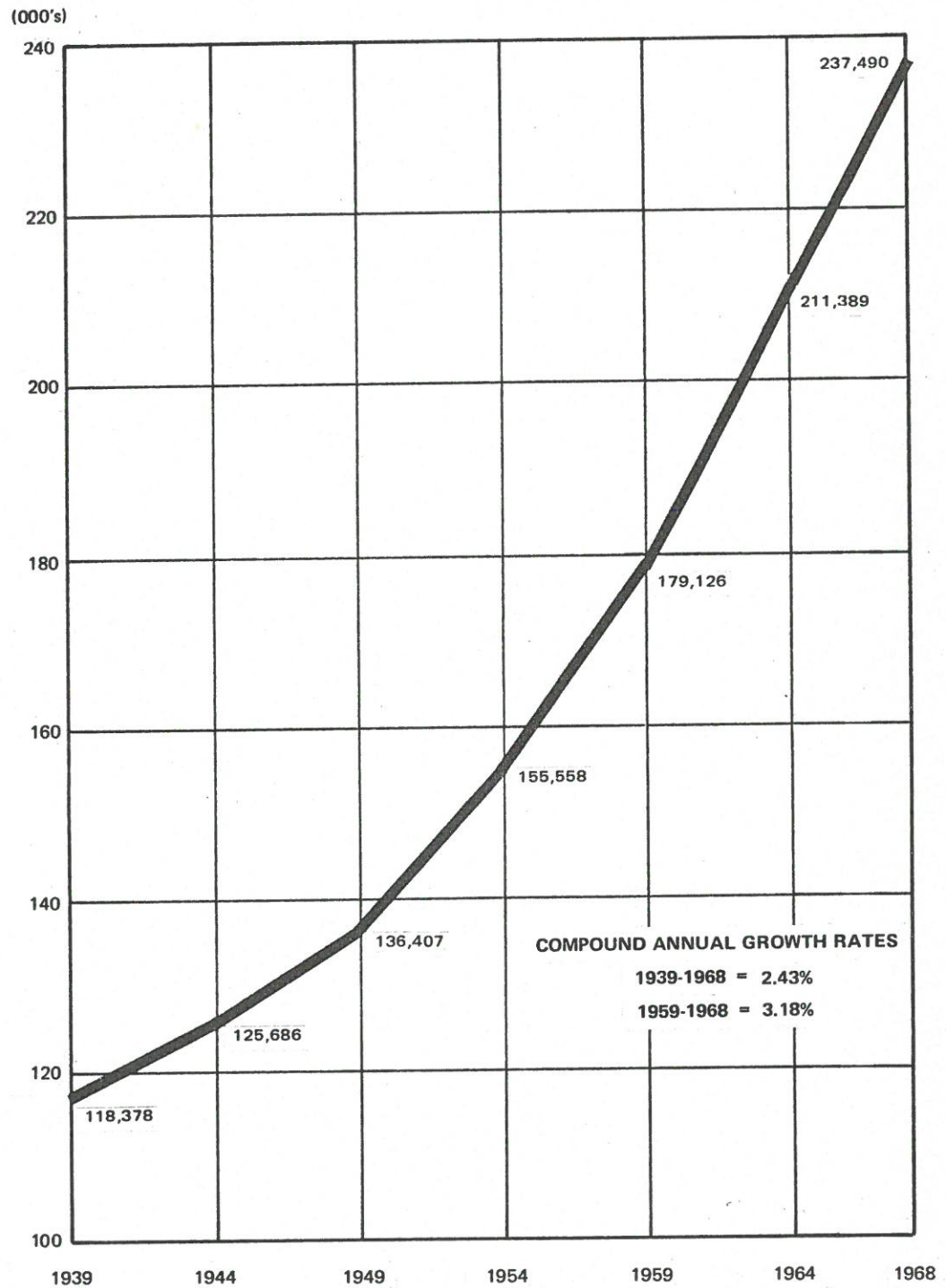
EXHIBIT II
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**AGE-SEX RATIOS OF THE REGISTERED INDIAN POPULATION
AND OF THE TOTAL CANADIAN POPULATION**
December 31, 1966

Population Groups	Total Canadian Population (000)					Registered Indian Population (000)				
	Age Groups					Age Groups				
	All Ages	0-4	5-19	20-64	65+	Total	0-4	5-19	20-64	65+
Population	20,014	2,197	6,230	10,050	1,537	225.4	41.5	86.5	86.6	10.8
Percentage of Population		10.98%	31.18%	50.21%	7.68%		18.42%	38.38%	38.42%	4.79%
		42.11%					56.80%			
Number of Females	9,960	1,068	3,058	5,014	820	109.8	20.5	43.2	41.1	5.3
Number of Males	10,054	1,129	3,172	5,036	717	115.6	21.0	43.3	45.5	5.5
Males per 1,000 Females	1,009	1,057	1,037	1,004	874	1,052	1,024	1,002	1,107	1,038

Sources: Dominion Bureau of Statistics
Indian Affairs Branch, Department of Indian Affairs and Northern Development

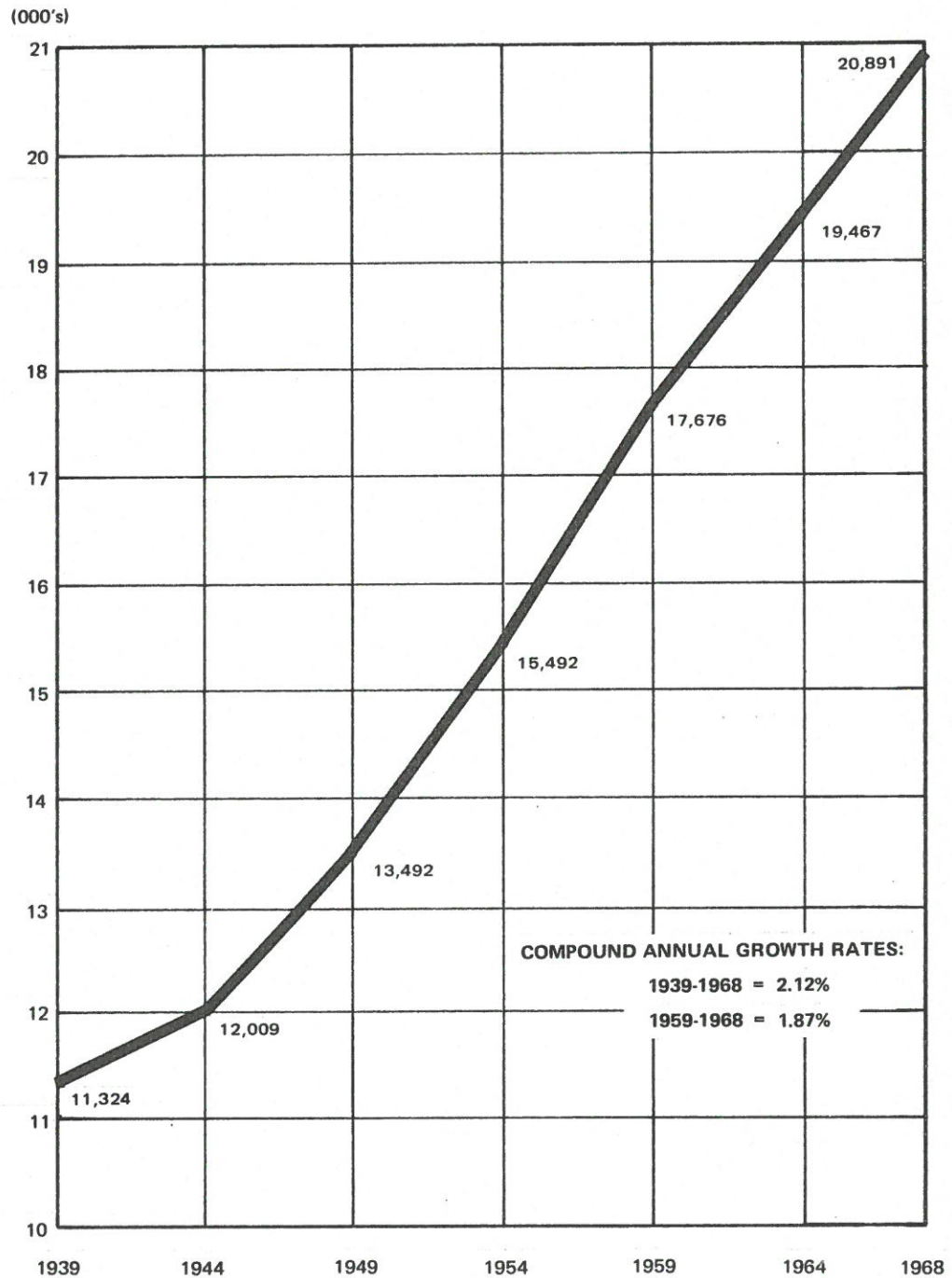
Computations by Booz, Allen & Hamilton Canada, Ltd.

EXHIBIT III
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HISTORICAL GROWTH TREND OF THE
REGISTERED INDIAN POPULATION
1939-1968**



SOURCE: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Computations by Booz, Allen & Hamilton Canada, Ltd.

EXHIBIT IV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HISTORICAL GROWTH TREND OF
THE TOTAL CANADIAN POPULATION
1939-1968**



SOURCE: Dominion Bureau of Statistics

Computations by Booz, Allen & Hamilton Canada, Ltd.

death rate from tuberculosis which prevailed through the 1940's and early 1950's.

Population growth among Indians in the Prairie Provinces has been significantly greater than the growth in other provinces during the past five years, as shown on Exhibit V, following this page. While the annual growth rate for the Indian population outside the Prairie Provinces has been approximately 2.5%, the annual growth rate of the Indian population in the three Prairie Provinces has been nearly 4%.

Since there is little in- or out-migration, natural increase has been the major cause of growth in the Indian population. As shown in Exhibit VI, following Exhibit V, for the four years 1964-1967, the average annual rate of natural increase among registered Indians was 31.5 per 1,000 population, compared to 12.9 for the total population.

The high rate of natural increase among Indians is due largely to an average birth rate nearly twice that of the Canadian population as a whole. This difference in birth rate is more pronounced in the Prairie Provinces than in the Eastern

EXHIBIT V
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
AVERAGE COMPOUND ANNUAL RATE OF INCREASE OF
THE REGISTERED INDIAN POPULATION BY PROVINCE
1963-1968

Province	Total Population December 31, 1963	Total Population December 31, 1968	Net Increase	Average Compound Annual Rate of Increase
Prince Edward Island	374	418	44	2.3%
Nova Scotia	3,935	4,411	476	2.3
New Brunswick	3,629	4,156	527	2.7
Quebec	23,043	26,302	3,259	2.7
Ontario	47,260	52,981	5,721	2.3
Eastern Provinces	<u>78,241</u>	<u>88,268</u>	<u>10,027</u>	<u>2.4%</u>
Manitoba	27,778	33,358	5,580	3.7%
Saskatchewan	27,672	33,852	6,180	4.1
Alberta	22,738	27,322	4,584	3.7
Prairie Provinces	<u>78,188</u>	<u>94,532</u>	<u>16,344</u>	<u>3.9%</u>
British Columbia	40,990	46,046	5,056	2.3%
Yukon	2,142	2,562	420	3.7
West Coast Provinces	<u>43,132</u>	<u>48,608</u>	<u>5,476</u>	<u>2.4%</u>
Northwest Territories	<u>5,235</u>	<u>6,082</u>	<u>847</u>	<u>3.0%</u>
Total Canada	<u>204,796</u>	<u>237,490</u>	<u>32,694</u>	<u>3.0%</u>

Note: Province of Newfoundland excluded because there is no registered Indian population

Sources: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Medical Services Branch, Department of National Health and Welfare

Computations by Booz, Allen & Hamilton Canada, Ltd.

EXHIBIT VI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**FOUR-YEAR AVERAGE BIRTH RATES, DEATH RATES,
AND NATURAL INCREASE OF THE TOTAL CANADIAN
AND OF THE REGISTERED INDIAN POPULATION
BY PROVINCE
1964-1967**

Province	Registered Indian Population			Total Canadian Population*		
	4-Year Average Birth Rate per 1,000	4-Year Average Death Rate per 1,000	4-Year Average Natural Increase per 1,000	4-Year Average Birth Rate per 1,000	4-Year Average Death Rate per 1,000	4-Year Average Natural Increase per 1,000
Prince Edward Island	35.9	16.9	19.0	21.8	9.4	12.4
Nova Scotia	30.8	8.3	22.5	21.3	8.6	12.7
New Brunswick	35.5	7.6	27.9	22.2	7.8	14.4
Quebec	32.9	6.8	26.1	20.2	6.7	13.5
Ontario	34.0	8.6	25.4	20.2	7.9	12.3
Eastern Provinces	33.1	8.0	25.1	20.4	7.4	13.0
Manitoba	47.7	8.8	38.9	20.0	8.1	11.9
Saskatchewan	50.8	9.0	41.8	21.1	7.8	13.3
Alberta	47.1	7.5	39.6	22.3	6.6	15.7
Prairie Provinces	48.9	8.5	40.4	21.3	7.4	13.9
British Columbia	37.9	11.0	26.9	18.4	8.8	9.6
Yukon	43.4	9.0	34.4	29.1	5.9	23.2
West Coast Provinces	38.2	10.9	27.3	18.5	8.8	9.7
Northwest Territories	38.0	7.0	31.0	43.3	7.7	35.6
Total Canada*	40.3	8.8	31.5	20.4	7.5	12.9

*Province of Newfoundland excluded because there is no registered Indian population and because data were not comparable

Sources: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Medical Services Branch, Department of National Health and Welfare

Computations by Booz, Allen & Hamilton Canada, Ltd.

Provinces, as shown in the following table, which is excerpted from Exhibit VI.

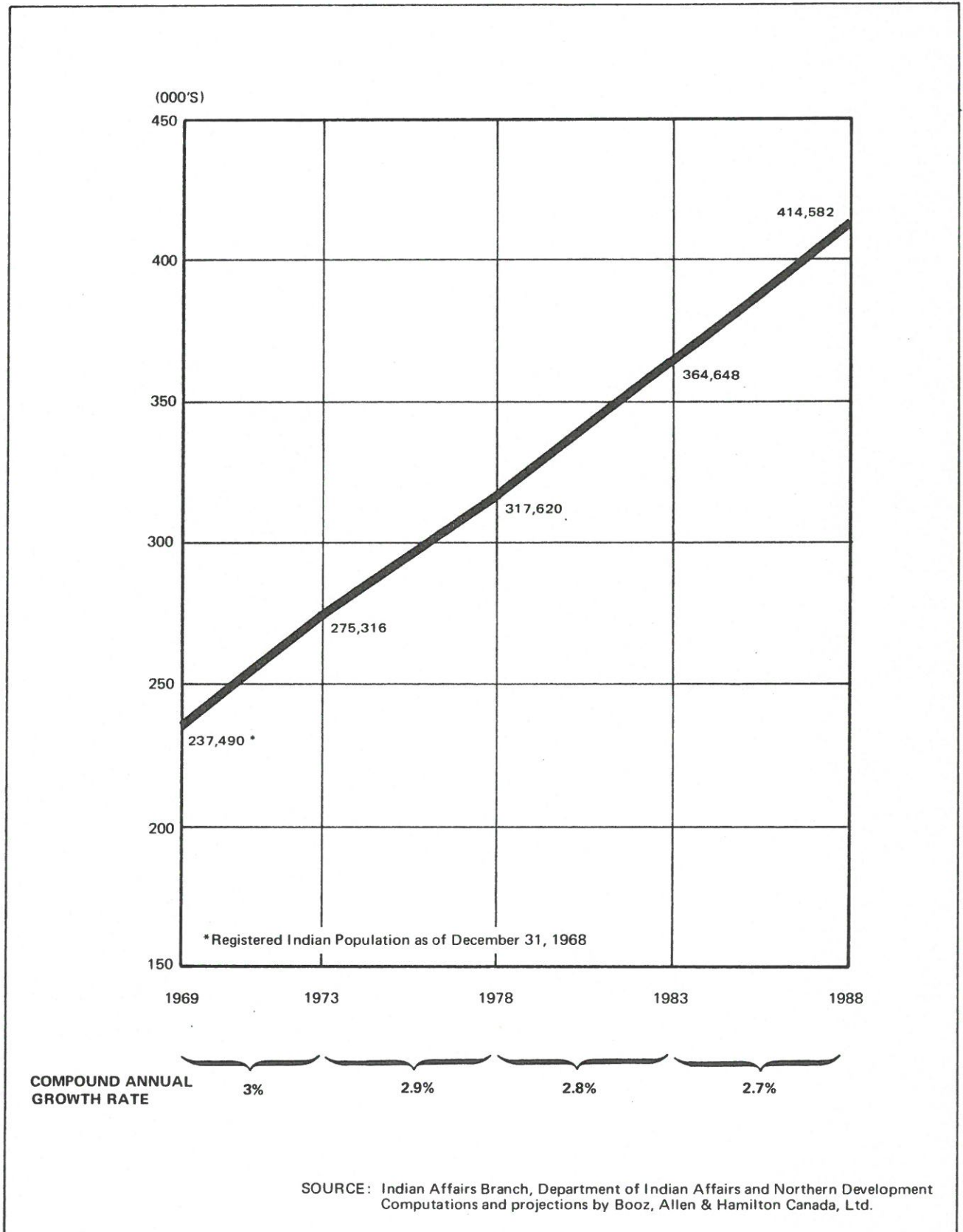
	1964-1967			
	<u>Prairie Provinces</u>		<u>Eastern Provinces</u>	
	Total		Total	
	Canadian		Canadian	
	<u>Indians</u>	<u>Population</u>	<u>Indians</u>	<u>Population</u>
Average birth rates per 1,000 population	48.9	21.3	33.1	20.4

It has been suggested that the lower Indian birth rate in the Eastern Provinces is related to the fact that Indians in that part of the country have adopted life patterns similar to those of the non-Indian portion of the population.

The registered Indian population is expected to increase by approximately 75% over the next 20 years. As shown in Exhibit VII, following this page, the registered Indian population is expected to grow from the present 237,490 to approximately 414,582 by the end of 1988.

This projection is based on several assumptions. The present 3% compound annual growth rate is expected to remain relatively constant through 1973. After 1973, a slight, continuous decline in the growth rate is anticipated. It is expected that as all Indians acquire better skills through improved

EXHIBIT VII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
PROJECTED REGISTERED INDIAN POPULATION
1969 - 1988



education and training, an increasing number will be brought into Canadian society, with a concurrent reduction of the birth rate. It is also expected that the birth rate of Indians in the Prairie Provinces will trend toward the rate of Indians in the Eastern Provinces as they improve their educational level and increase their participation in the overall economic development of the provinces.

Despite these moderating effects, the annual rate of growth in the Indian population is expected to remain significantly greater than the approximately 2% growth rate of the total Canadian population. Such increase will in part determine the extent to which health care services will be needed in Indian communities in the future.

3. DEMAND FOR INDIAN HEALTH SERVICES WILL CONTINUE TO BE ESPECIALLY HIGH IN THE MIDDLE NORTH, WHERE OVER ONE-HALF THE POPULATION WILL BE REGISTERED INDIANS BY 1988

The Middle North is geographically most remote from conventional health care resources and has a proportion of Indian population greater than that in any other section of the provinces. As a consequence, it has become the area of heaviest involvement by the federal government in the direct provision of health care outside of the Yukon and Northwest territories.

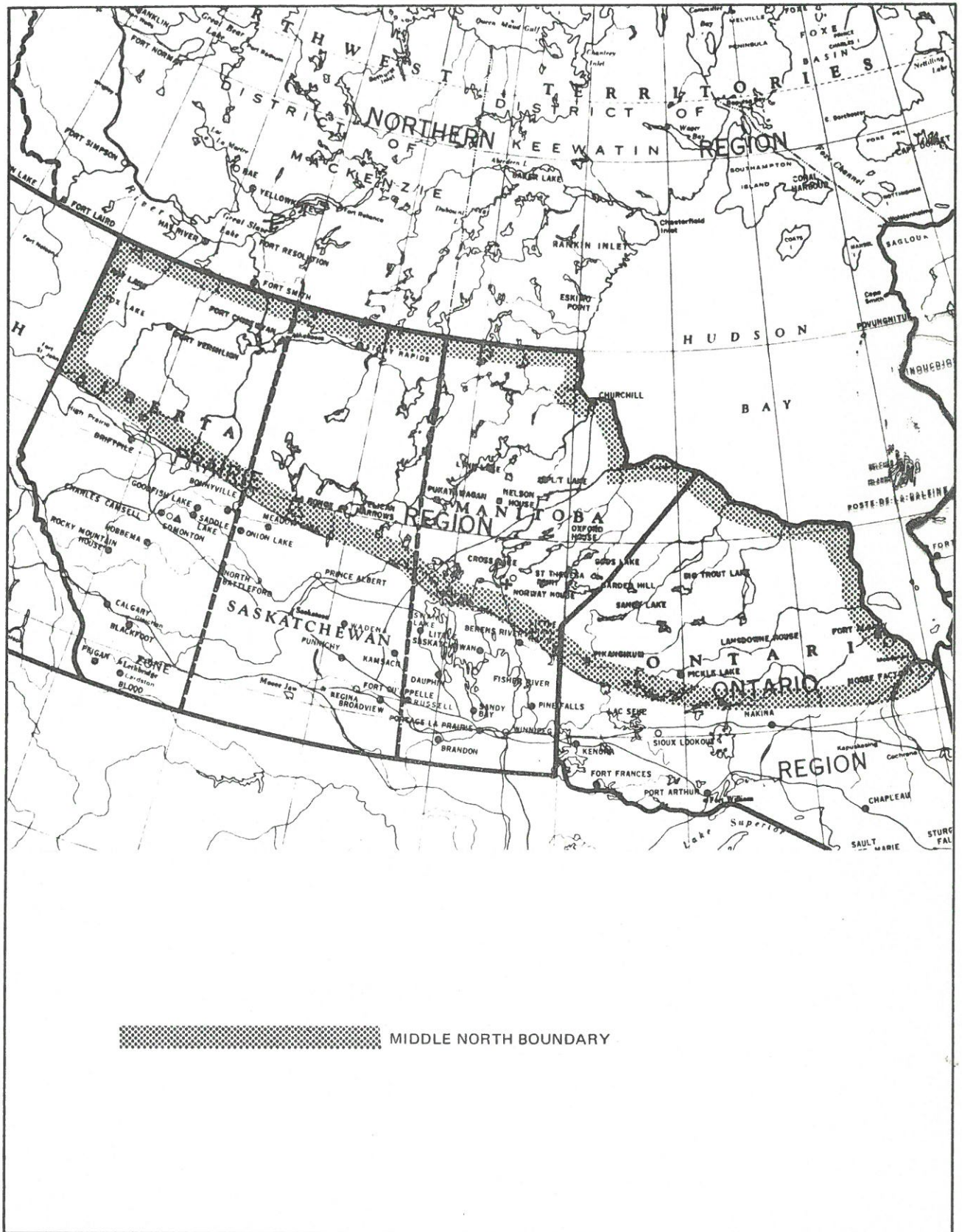
As such, the Middle North is an area of particular concern in the efforts by the Department of National Health and Welfare to plan for the improvement of Indian health care and has been singled out for intensive study. The Middle North served as the sample area in this study of Indian health services. Its boundaries are indicated in Exhibit VIII, following this page.

(1) Indians in the Middle North Comprise a Greater Proportion of the Population Than They Do in Any Other Section of Canada and Have Increased at a Faster Rate than the Total Indian Population

While registered Indians constituted only 1.1% of the total Canadian population in 1966, they comprised nearly 44% of the total population in the Middle North. As shown in the table on page 16, the total population of the Middle North was estimated to be 88,495. Of that number, 38,703 were registered Indians. Approximately 17.2% of the total registered Indian population of 225,372 in 1966 resided in the Middle North.

The growth rate of the Indian population in the Middle North is considerably greater than that of the total Indian population. As the same table also indicates, the registered Indian population of the Middle North grew at an average compound annual rate of 4.8% during the years 1961 to 1966. The total Indian population growth rate was approximately 3%.

EXHIBIT VIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
BOUNDARIES OF THE MIDDLE NORTH



During this same period, the non-Indian population of the Middle North grew at a rate of 1.9%, or at about the average rate for the Canadian population as a whole. The growth rate of the Indian population contributed greatly to the compound annual growth rate of 3.2% for the total population of the Middle North.

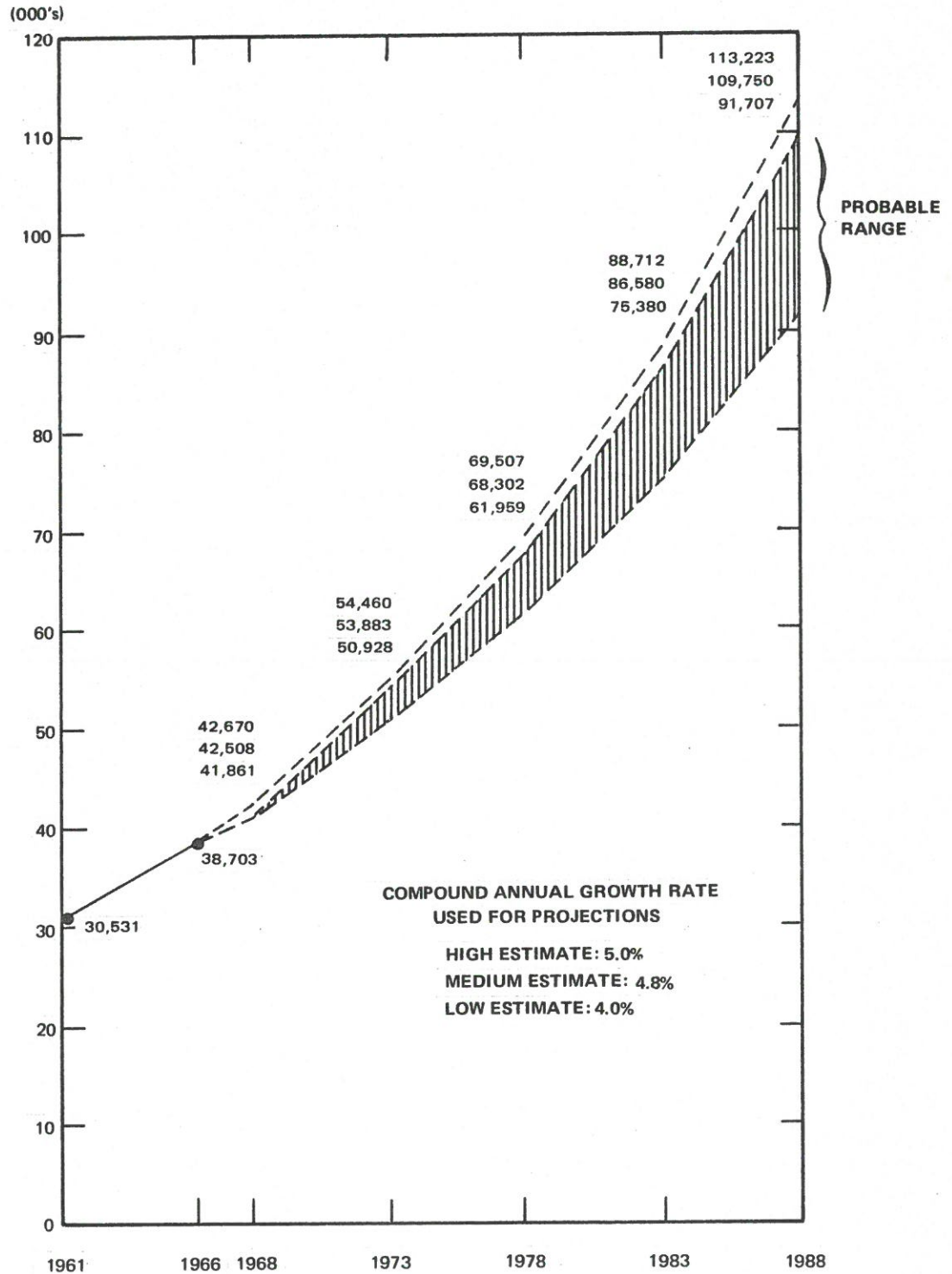
	Middle North Population		Compound Annual Growth Rate
	1961	1966	
Registered Indian population	30,531	38,703	4.8%
Other population	45,323	49,792	1.9
Total population in the Middle North	<u>75,854</u>	<u>88,495</u>	<u>3.2%</u>

(2) Projections Indicate That Registered Indians Will Comprise Approximately 56% of the Total Population in the Middle North by 1988

In the absence of major economic developments, it is projected that the total population of the Middle North in 1988 will range between 167,000 and 192,000.

The projected growth of the registered Indian population of the Middle North is indicated in Exhibit IX, following this page. If the Indian population were to continue to grow at the 4.8% rate of 1961-1966, it would reach 109,750 by 1988. It is more likely,

EXHIBIT IX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**PROJECTION OF REGISTERED INDIAN POPULATION
IN THE MIDDLE NORTH
1968 - 1988**



SOURCE: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Computations and projections by Booz, Allen & Hamilton Canada, Ltd.

however, that the rate of growth will decline to resemble more closely the 4.0% rate for the total Indian population in the Prairie Provinces. This rate of growth would result in a projected Indian population of 91,707 by 1988. While it is highly unlikely to occur, an increase in rate of growth to 5.0% would result in a projected 1988 Indian population of 113,223.

The non-Indian population of the Middle North is expected to range between 69,170 and 82,109 by 1988, as shown in Exhibit X, following this page. If the non-Indian population were to continue growing at its 1961-1966 rate of 1.9%, the projected population in 1988 would be 75,320.

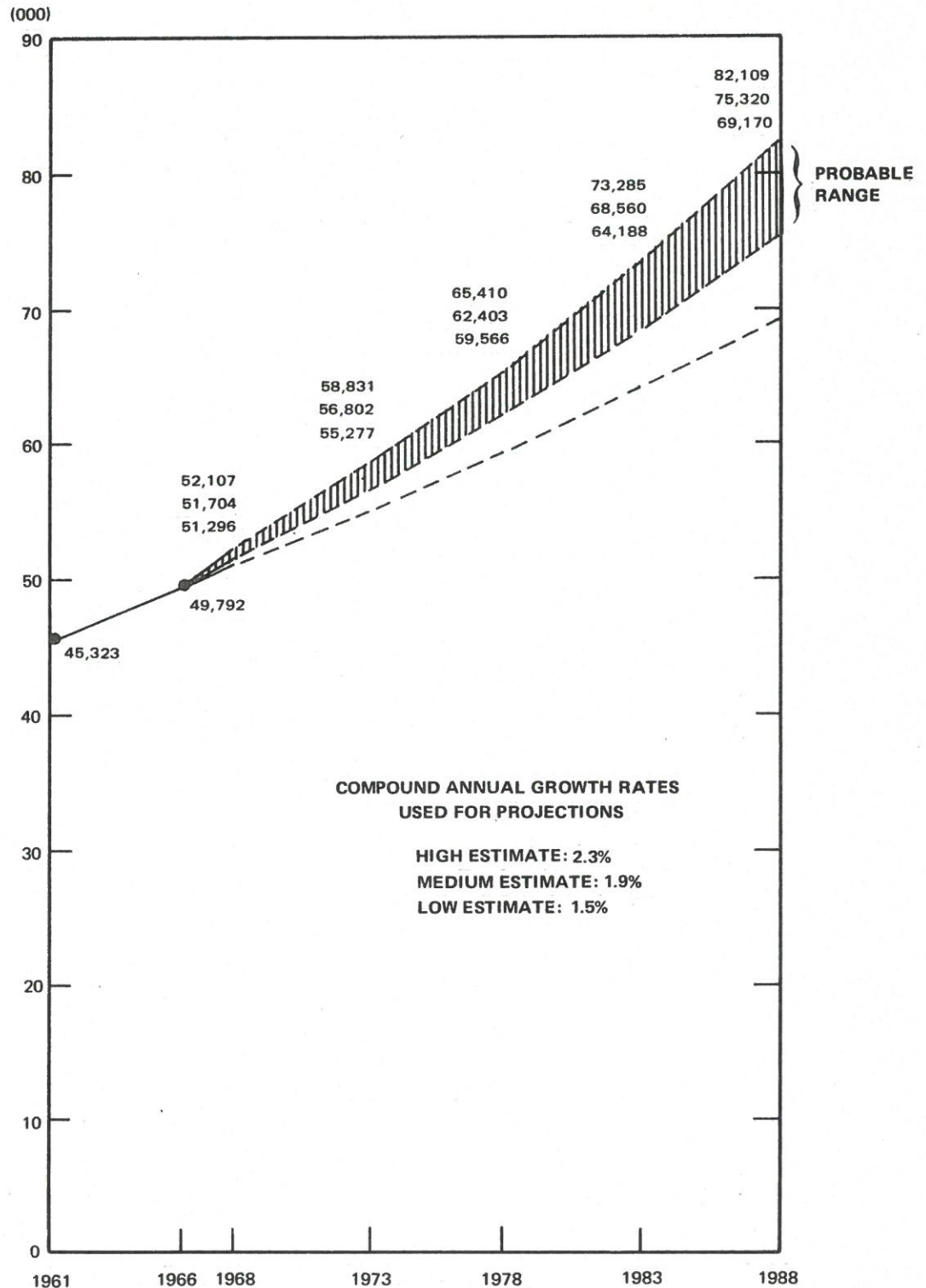
Barring major economic developments which would result in a large influx of non-Indians to the Middle North, it is expected that the growth rate for the remaining population will not increase beyond 2.3%. At such a rate, the maximum projection for the remaining population would be 82,109 in 1988. The effects of the moderate economic development that is expected to take place have been considered in the 2.3% growth rate used in this projection. Should the rate of growth of the non-Indian population drop to 1.5%, which is not likely, the minimum projected 1988 population would be 69,170.

The probable ranges of both the registered Indian population and the remaining population are combined to project the probable total population of the Middle North. As indicated in Exhibit XI, following this page, it is expected that the Middle North will have a total population ranging between approximately 167,000 and 192,000 by 1988.

* * * * *

The anticipated growth of the Indian population will have a major influence on the requirements for Indian health services. The need for Indian health services will be especially acute in the Middle North, where over half the population will be registered Indians within 20 years. The Middle North was selected as the sample area in this study, and particular attention is given the area in subsequent chapters, which assess the health status of Indians, evaluate the health services available to them, and propose recommended actions for improving the health of Indians and the health care delivered to them.

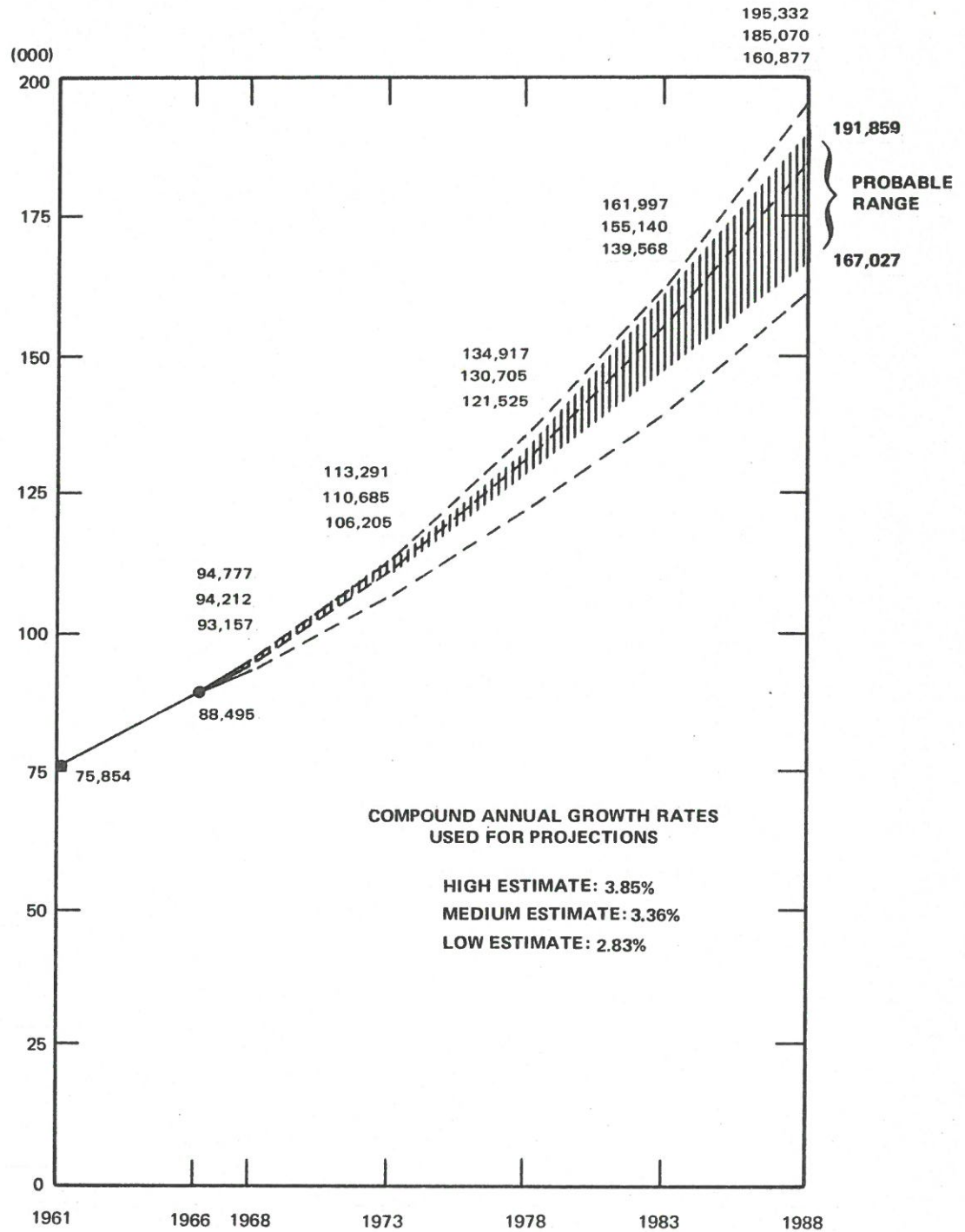
EXHIBIT X
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**PROJECTION OF OTHER THAN REGISTERED INDIAN
POPULATION IN THE MIDDLE NORTH
1968 - 1988**



SOURCE: Dominion Bureau of Statistics

Computations and projections by Booz, Allen & Hamilton Canada, Ltd.

EXHIBIT XI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
PROJECTION OF TOTAL POPULATION IN THE
MIDDLE NORTH
1968 - 1988



SOURCES: Dominion Bureau of Statistics
Indian Affairs Branch, Department of Indian Affairs and Northern Development
Computation and projections by Booz, Allen & Hamilton Canada, Ltd.

II. THE HEALTH STATUS OF INDIANS

II. THE HEALTH STATUS OF INDIANS

The health of Indians is poorer than the health of other Canadians. Comparisons of morbidity and mortality statistics for the registered Indian population and for the total Canadian population indicate that Indians have a higher rate of death and a more frequent incidence of illness in certain disease categories. Diseases of the respiratory system, the leading cause of death and illness among Indians, kill and hospitalize Indians at a rate more than three times as great as the national rate. Other major causes of death and illness show similar discrepancies between Indians and non-Indians.

Observation of the conditions in which Indians live, particularly in the sample area of the Middle North, indicates that Indians' higher mortality and morbidity rates are in part the result of such substandard conditions as overcrowding of poor quality dwellings, inadequate sanitary facilities and water systems, and lack of electricity.

The mortality and morbidity data presented in this chapter are applicable to the registered Indian population as a whole, with the exceptions noted. Discussion of environmental conditions that contribute to the poor health of Indians is based upon observation made in visits to 39 Indian communities in the Middle North and 8 reserves in southern

areas. The most intensive observations were concentrated in the Middle North, the sample area selected by the Department of National Health and Welfare to receive particular attention. While certain of the conclusions reached in the report may be more pertinent to the sample area, they are applicable to other areas insofar as general conditions resemble those in the Middle North.

1. MORTALITY RATES OF INDIANS ARE HIGHER THAN THOSE OF OTHER CANADIANS

The discrepancy between the mortality rates of Indians and non-Indians, particularly noted in certain disease categories, indicates that the health of Indians is far worse than that of the rest of the population. Death comes more frequently to the Indian population and more often strikes the young. Certain diseases result in death two to five times more frequently among Indians than they do among the population as a whole.

This is in part the result of the primitive and difficult conditions in which many Indian people live. These conditions inherently are more hazardous to health and threaten particularly infants and children.

Mortality and morbidity data are useful as general indicators of the state of health of the Indian people and of the comparability of the health of Indians with that of other Canadians. The conclusion that

Indian rates of mortality and morbidity are higher than national rates can be made with confidence, but conclusions regarding the extent of that difference cannot be stated with as much reliability. Mortality and morbidity data reflect certain results of poor health, that is, hospitalization and death, and they can be used to indicate general trends. Such data are, however, not absolute measures of health and poor health. The inference of actual incidence of poor health from measured results of certain kinds of illness should be drawn and applied with great caution.

(1) There Are More Deaths per 1,000 in the Indian Population than in the Population as a Whole

Despite a rapid decline in the death rate of the Indian population during the last decade, the rate remains higher than that for the population as a whole, as shown in Exhibit XII, following this page. During the last four years, the Indian crude death rate has declined faster than has the national rate, but it is still approximately 13% higher than the death rate for the total population.

(2) Indians Die Younger than Other Canadians

Exhibit XIII, following Exhibit XII, compares the average age at death of Indians and of all Canadians for selected years from 1963 to 1968. While the Indian average age at death has

EXHIBIT XII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
CRUDE DEATH RATE OF REGISTERED INDIANS
AND OF ALL CANADIANS
1956-1967

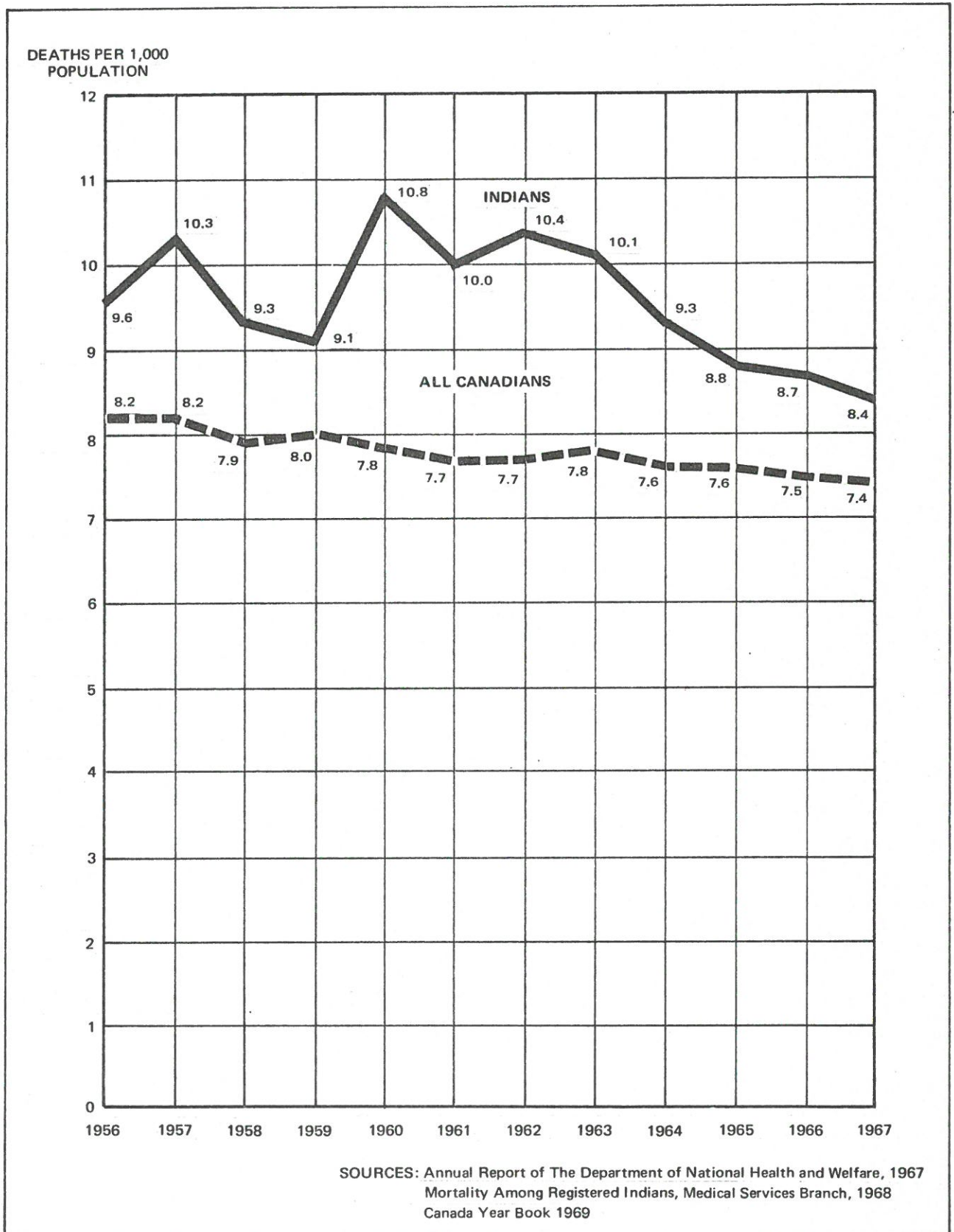
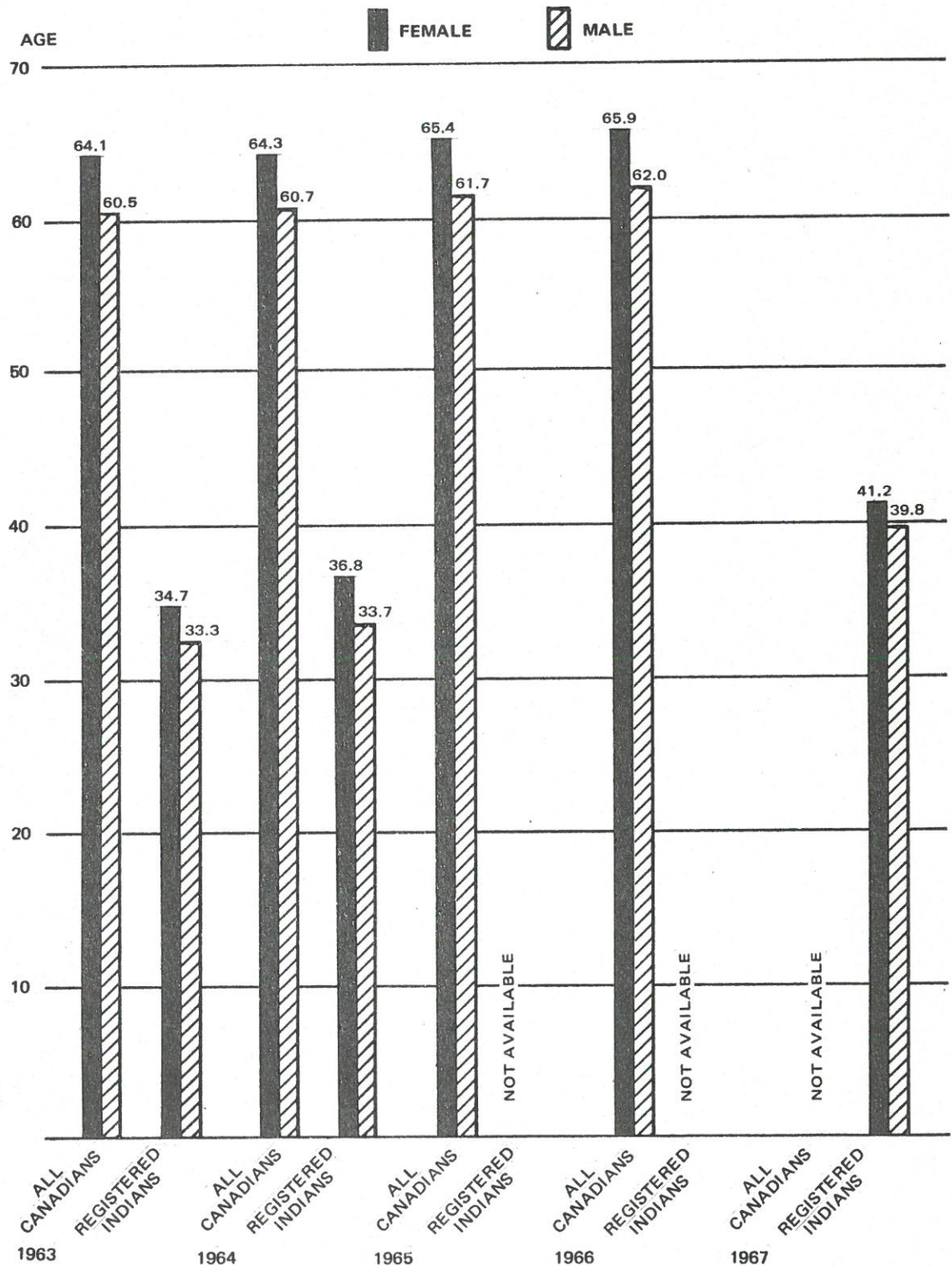


EXHIBIT XIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
AVERAGE AGE AT DEATH OF REGISTERED INDIANS
AND OF ALL CANADIANS
1963-1967



SOURCES: Canada Year Book, 1968 and 1969
Indian Vital Statistics, Medical Services Branch, 1963 and 1964
Registered Canadian Indians Average Age at Death, Medical Services Branch, 1968

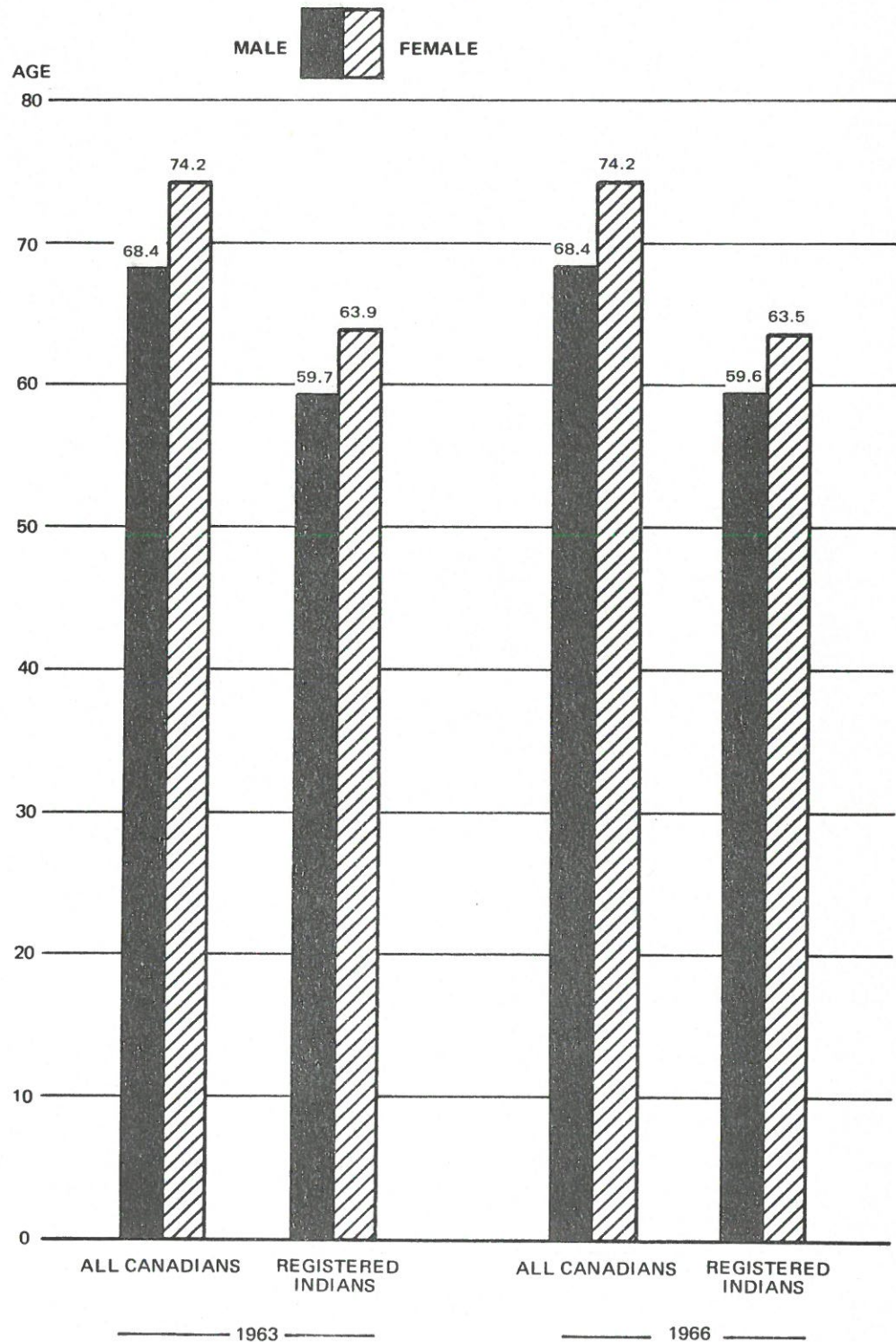
risen more rapidly than that for other Canadians in recent years, Indians still die at an average age that is approximately 20 years younger than the average age at death of the Canadian population.

A population group's average age at death is strongly influenced by the proportion of its members that die early in life. A high mortality rate among young Indians significantly reduces the average age at death for the overall Indian population. When deaths of children under 12 months of age are excluded from computation, the average age at death for Indians increases significantly. Using this procedure, the average age at death for Indian males rises 24.4%, to 49.5 years; the average age for females rises 27.3%, to 52.5 years.

(3) Life Expectancy at Birth Is Approximately Ten Years Less for Indians than for Non-Indians

Like the population's average age at death, the average number of years an Indian at birth can expect to live is affected by the high mortality rate among the young. As shown in Exhibit XIV, following this page, an Indian's life expectancy at birth is approximately ten years less than that of the population as a whole. In 1966, the average Indian male had a life expectancy at birth of 59.6 years; the average male, 68.4 years.

EXHIBIT XIV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
LIFE EXPECTANCY AT BIRTH OF REGISTERED
INDIANS AND OF ALL CANADIANS
1963 and 1966



SOURCE: Indian Vital Statistics, Medical Services Branch, 1963
Indian Health Program Review, Medical Services Branch,
1969 and 1970

In the same year, the average Indian female at birth could expect to live 63.5 years, as compared to the 74.2 years life expectancy of the average female.

- (4) While the High Frequency of Death in the Early Years of Life Accounts for Some of the Discrepancy Between National and Indian Mortality Rates, the Difference in Rates for Older Age Groups Is Also Significant

As shown in Exhibit XV, following this page, the variance between Indian and national mortality rates is most pronounced in the younger years, but continues to exist in all age categories up to 75 years.

At all ages below 50 years, the mortality rate for Indians was considerably greater than that of the total population. The difference is particularly great during ages 1 to 4 and 20 to 44. The mortality rate for Indians in the 25-29 age group is five times that for other Canadians at the same age.

For all ages between 50 and 75, the mortality rate for Indians was slightly higher than the national rate; for each age over 75, the mortality for Indians was slightly less than the national rate.

It can be seen that death among Indians more often strikes the young by considering the percentage of the Indian and non-Indian

EXHIBIT XV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**COMPARISON OF MORTALITY RATES
OF REGISTERED INDIANS AND OF ALL CANADIANS
BY AGE AND BY SEX**

Age Group	Males			Females			Both Sexes		
	Indian Rate per 1,000 population	National Rate per 1,000 population	Ratio of Indian to National Rate	Indian Rate per 1,000 population	National Rate per 1,000 population	Ratio of Indian to National Rate	Indian Rate per 1,000 population	National Rate per 1,000 population	Ratio of Indian to National Rate
Under 1 Year	56.6	25.8	2.2:1	50.5	20.2	2.5:1	53.6	23.1	2.3:1
1-4	4.2	1.1	3.9:1	4.1	0.9	4.6:1	4.2	1.0	4.2:1
5-9	1.0	0.6	1.6:1	1.3	0.4	3.3:1	1.1	0.5	2.3:1
10-14	0.9	0.6	1.5:1	0.4	0.3	1.5:1	0.7	0.4	1.7:1
15-19	2.3	1.3	1.8:1	1.3	0.5	2.7:1	1.8	0.9	2.0:1
20-24	6.1	1.8	3.4:1	2.6	0.5	5.3:1	4.4	1.2	3.7:1
25-29	6.1	1.6	3.8:1	4.8	0.6	8.0:1	5.5	1.1	5.0:1
30-34	6.1	1.7	3.6:1	4.7	0.9	5.2:1	5.4	1.3	4.2:1
35-39	7.6	2.2	3.5:1	6.4	1.3	4.9:1	7.0	1.8	3.9:1
40-44	9.2	3.4	2.7:1	6.7	2.0	3.4:1	8.0	2.7	3.0:1
45-49	10.5	5.7	1.8:1	8.4	3.3	2.6:1	9.6	4.5	2.1:1
50-54	9.3	9.7	1.0:1	8.5	5.0	1.7:1	8.9	7.4	1.2:1
55-59	17.8	15.4	1.2:1	17.3	7.7	2.2:1	17.6	11.6	1.5:1
60-64	21.6	24.0	0.9:1	23.2	12.2	1.9:1	22.3	18.1	1.2:1
65-69	42.5	36.2	1.2:1	22.6	19.5	1.2:1	33.8	27.5	1.2:1
70-74	53.8	53.1	1.0:1	42.8	30.9	1.4:1	49.0	41.2	1.2:1
75-79	70.0	79.9	0.9:1	50.5	53.9	0.9:1	61.1	65.9	0.9:1
80-84	95.6	124.0	0.8:1	85.4	93.6	0.9:1	90.7	107.5	0.8:1
85 and Over	174.0	213.4	0.8:1	149.8	183.4	0.8:1	160.6	196.0	0.8:1
All Ages	9.7	8.7	1.1:1	7.6	6.2	1.2:1	8.7	7.5	1.2:1

Source: Indian Vital Statistics, Medical Services Branch, 1966
Vital Statistics, 1966

population's total mortality that occurs in low age groups.

Exhibit XVI, following this page, presents such a breakdown for Saskatchewan, the only province for which these figures were available. Approximately 40% of all deaths in the Indian population occurred among children less than four years old. The same age group accounted for only 6% of all deaths in the non-Indian population of the province.

While deaths among those under 70 years old comprised approximately 41% of the mortality for non-Indians, nearly 84% of all Indian deaths occurred prior to age 70.

Infant mortality is not the sole cause of differences in Indian and national mortality rates. The high incidence of infant death among Indians accounts in large part for the discrepancy in the cumulative percentage of mortality between Indians and non-Indians in the lower age groups. However, it should be noted that the cumulative percentage of Indian mortality continues to increase over that for non-Indians as each older age category is added. This reflects the greater susceptibility of the Indian population, at all ages, to infectious disease and trauma leading to death.

EXHIBIT XVI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**MORTALITY OF REGISTERED INDIANS AND
OTHER CANADIANS IN SASKATCHEWAN BY AGE**
1967

Age	Number of Deaths		Percentage of Deaths		Cumulative Percentage	
	Indians	Non-Indians	Indians	Non-Indians	Indians	Non-Indians
Under 1 Year	91	374	33.0%	5.2%	33.0%	5.2%
1	15	26	5.4	0.4	38.4	5.6
2	2	15	0.7	0.2	39.1	5.8
3	5	7	1.8	0.1	40.9	5.9
4	3	13	1.1	0.2	42.0	6.1
5-9	8	32	2.9	0.4	44.9	6.5
10-14	4	46	1.4	0.7	46.3	7.2
15-19	6	101	2.2	1.4	48.5	8.6
20-24	10	110	3.6	1.5	52.1	10.1
25-29	6	44	2.2	0.6	54.3	10.7
30-34	7	57	2.5	0.8	56.8	11.5
35-39	11	72	4.0	1.0	60.8	12.5
40-44	11	134	4.0	1.9	64.8	14.4
45-49	14	224	5.1	3.1	69.9	17.5
50-54	9	293	3.3	4.1	73.2	21.6
55-59	5	370	1.8	5.2	75.0	26.8
60-64	12	453	4.3	6.3	79.3	33.1
65-69	12	559	4.3	7.8	83.6	40.9
70-74	13	789	4.7	11.0	88.3	51.9
75-79	9	1,083	3.3	15.1	91.6	67.0
80 and Over	23	2,363	8.4	33.0	100.0	100.0
Total	<u>276</u>	<u>7,165</u>	<u>100.0%</u>	<u>100.0%</u>		

Source: Saskatchewan Vital Statistics, 1967

(5) Infant Mortality Is More Frequent Among Indians than Among Other Canadians, Despite a Marked Decline in the Indian Rate During the Last Decade

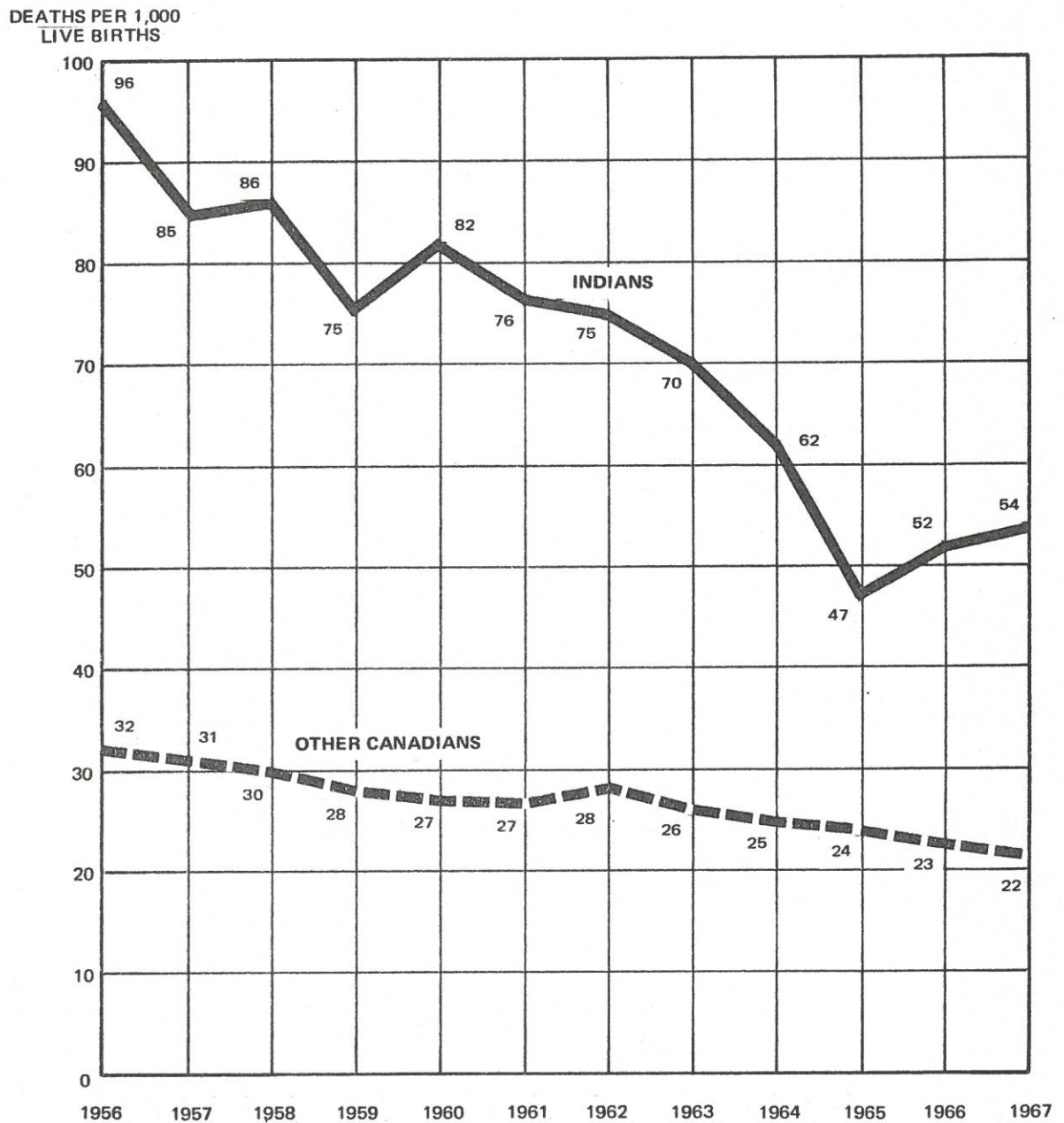
Exhibit XVII, following this page, compares the Indian infant mortality rate with that of other Canadians for the period 1956-1967. The rate of infant mortality declined approximately 49% between 1956 and 1965. An increase of approximately 15% from 1965 to 1967 brought the rate of Indian infant deaths per 1,000 live births to 54, or approximately 2.5 times the rate of 22 deaths per 1,000 live births for other Canadians.

Infant mortality rates are subject to wide variation due to small numbers, and figures presented here are used to indicate trends of Indian infant mortality in relation to the rest of the population.

(6) The Leading Causes of Death Are Not the Same for Indians as for the Rest of the Population

While Indians and other Canadians contract the same diseases, the diseases that account for the most deaths differ between the two populations. Exhibit XVIII, following Exhibit XVII, compares death rates by cause of death among Indians and among the population as a whole.

EXHIBIT XVII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
INFANT MORTALITY RATES OF REGISTERED
INDIANS AND OF OTHER CANADIANS
1956-1967



NOTE: National rates are derived from reports of Dominion Bureau of Statistics and the Indian rates are estimated by Medical Services Branch, Department of National Health and Welfare.

SOURCE: "Prenatal Care and Infant Mortality Among Canadian Indians," Canadian Nurse, Vol. 63, No. 9, September 1967, P. 1
Canadian Registered Indians Trends in Infant Mortality, Medical Services Branch
Canada Year Book 1969
Indian Vital Statistics-Medical Services Branch 1964

EXHIBIT XVIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
DEATH RATES OF REGISTERED INDIANS
(EXCLUDING THOSE IN ONTARIO)
AND OF ALL CANADIANS,
BY MAJOR CATEGORIES OF CAUSE OF DEATH
1963

Major Classifications of Causes of Death	Male			Female		
			Ratio of			Ratio of
	National	Indian	Indian to	National	Indian	Indian to
	Death Rate	Death Rate	National	Death Rate	Death Rate	National
	---	per 100,000	---	---	per 100,000	---
Diseases of Respiratory System	63.2	211.9	3.4:1	40.6	174.4	4.3:1
Accidents	90.2	179.7	2.0:1	35.6	117.1	3.3:1
Diseases of Circulatory System	360.5	133.8	0.4:1	242.6	85.9	0.4:1
Diseases of Early Infancy	43.6	127.6	2.9:1	30.8	85.9	2.8:1
Diseases of Digestive System	33.3	75.6	2.3:1	24.7	63.8	2.6:1
Neoplasms	145.5	63.2	0.4:1	123.5	57.3	0.5:1
Infective and Parasitic Diseases	10.0	55.8	5.6:1	4.9	26.0	5.3:1
Diseases of Nervous System	87.4	39.7	0.5:1	94.0	52.1	0.6:1
Senility and Ill-Defined Diseases	7.2	28.5	4.0:1	5.8	37.7	6.5:1
Congenital Malformations	15.3	26.0	1.7:1	13.3	26.0	2.0:1
Disease of Genitourinary System	19.7	9.9	0.5:1	12.3	14.3	1.2:1
Complications of Childbirth	-	-	-	35.4	11.7	0.3:1
Allergic, Endocrine, and Blood Diseases	19.5	8.7	0.4:1	20.9	9.1	0.4:1
Diseases of Skin and Musculoskeletal System	2.7	2.5	0.9:1	3.7	7.8	2.1:1
Mental and Psychoneurotic Diseases	2.9	2.5	0.9:1	2.1	2.6	1.2:1
All Causes	901.0	965.2	1.1:1	656.6	771.8	1.2:1

Source: Indian Vital Statistics, Medical Services Branch, 1963

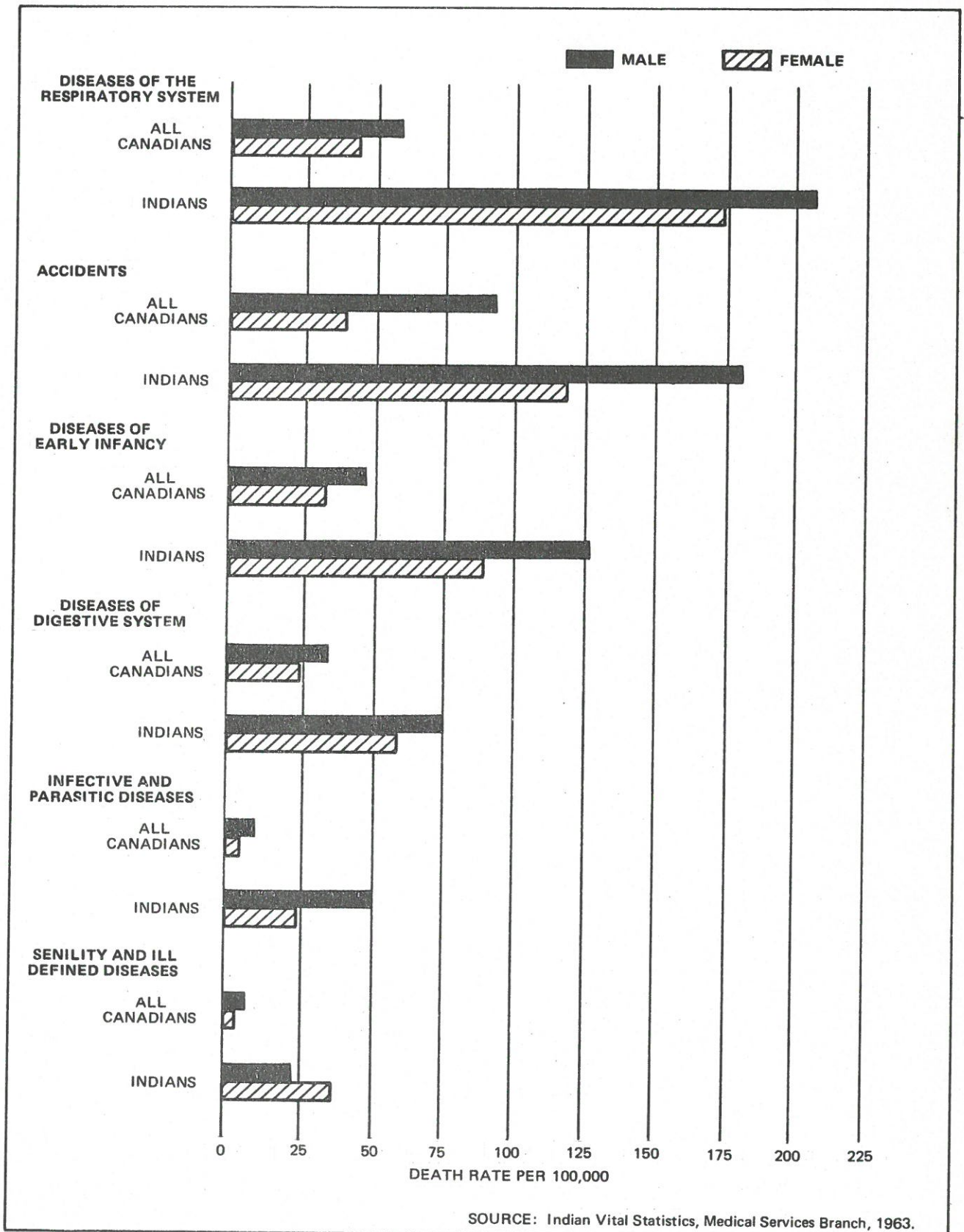
Many diseases cause death among Indians at a rate two or three times greater than they do among all Canadians, as is further illustrated in Exhibit XIX, following this page. This is true of the following:

- . Diseases of the respiratory system kill Indian males at 3.4 times the national rate and females at 4.3 times the national rate.
- . Accidents kill twice as many Indian males and 3.3 times as many Indian females.
- . Diseases of early infancy cause death among Indians at approximately 2.9 times the national rate.
- . Diseases of the digestive system cause more than twice as many deaths among Indians as among the population as a whole.
- . Infective and parasitic diseases cause death over five times as frequently among Indians as among the population as a whole.
- . Senility and ill-defined diseases kill four times as many Indian males and over six times as many Indian females as in the population as a whole.

Conversely, the following diseases cause death approximately half as often among Indians as among the Canadian population as a whole.

- . Diseases of the circulatory system
- . Neoplasms
- . Diseases of the nervous system
- . Allergic, endocrine, and blood diseases

EXHIBIT XIX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**SIGNIFICANT DIFFERENCES IN CAUSES OF DEATH OF
REGISTERED INDIANS (EXCLUDING THOSE IN ONTARIO)
AND OF ALL CANADIANS BY MAJOR DISEASE CATEGORIES
1963**



The percentage of total Indian mortality caused by various diseases is shown in Exhibit XX, following this page, to indicate the leading causes of death in the Indian population. Data are particular to Saskatchewan for the year 1967. As the chart indicates, accidents, pneumonia, and heart disease account for more than 50% of all deaths. The classification of diseases differs from that in Exhibit XVIII and the two exhibits are not directly comparable.

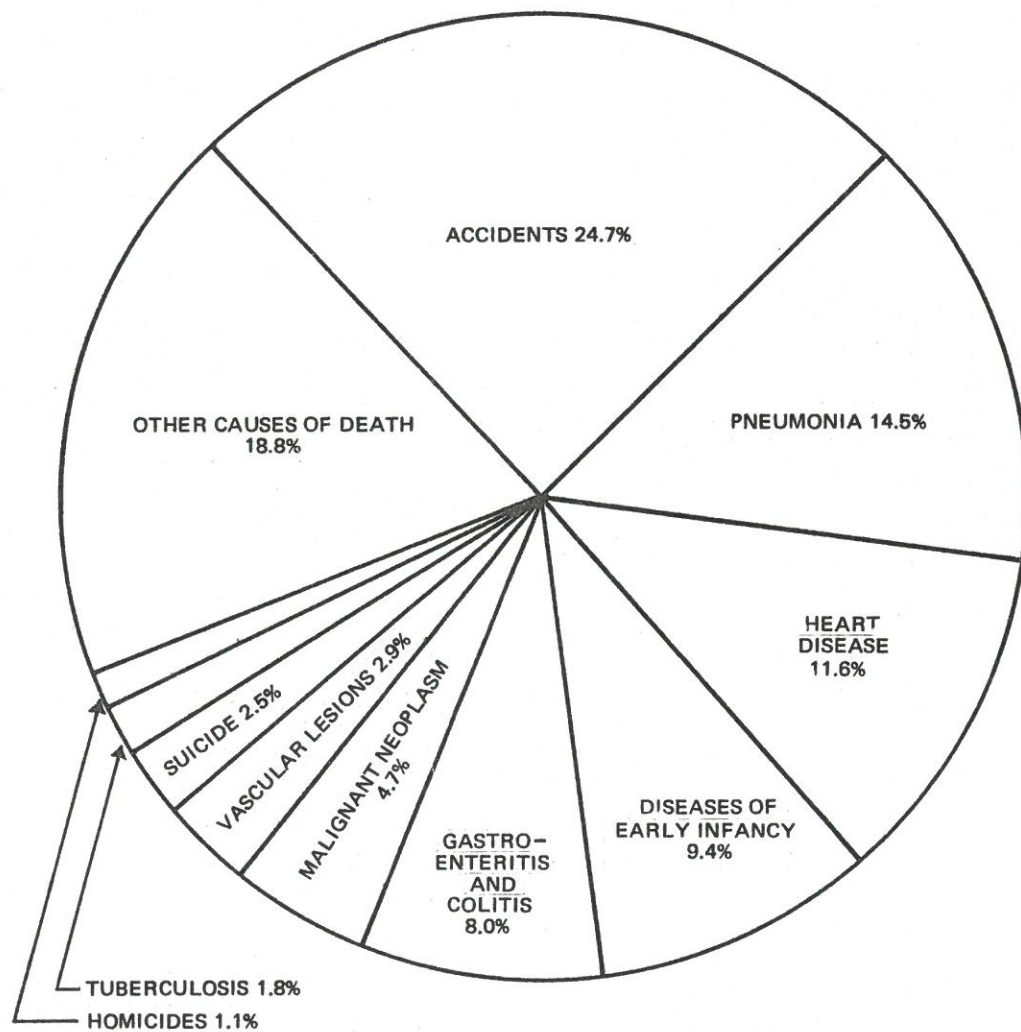
(6.1) Respiratory Diseases Are the Leading Cause of Death
Among Indians

Diseases of the respiratory system cause more deaths among Indians than any other illness, as can be seen in Exhibit XVIII. Of every 100,000 Indians, 211.9 males and 174.4 females died of such diseases in 1963. This is nearly four times the rate of death from respiratory disease among the population as a whole.

Four diseases cause approximately 85% of all deaths from respiratory disease among Indians:

- . Bronchopneumonia
- . Atypical pneumonia
- . Influenza
- . Lobar pneumonia

EXHIBIT XX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**PERCENTAGE OF DEATHS FROM VARIOUS
CAUSES AMONG REGISTERED INDIANS
IN SASKATCHEWAN
1967**



SOURCE: Saskatchewan Vital Statistics, 1967

(6.2) The Tuberculosis Mortality Rate for Indians Is Significantly Higher than That for Other Canadians, but Has Decreased Substantially over the Past 40 Years

The rate of death from tuberculosis among Indians was estimated at approximately 20 deaths per 100,000 population in 1960, compared to rates that ranged from 350 to 550 during the 1930's and 1940's. While more recent Indian rates of death from this disease are not available, it is estimated that they remain significantly higher than the 1967 rate of 3.2 deaths per 100,000 for the total population. The reduction in the incidence of this disease is due primarily to the extensive tuberculosis program conducted by the Department of National Health and Welfare since 1945.

(6.3) Accidents and Violence Are the Second Most Frequent Cause of Death Among Indians

As indicated in Exhibit XVIII, accidents killed 179.7 Indian males and 117.1 females per 100,000 population in 1963, or at a rate approximately 2.5 times that for the nation as a whole. Of all accidental deaths, 75% are the result of five primary causes:

- . Motor vehicle accidents
- . Other transportation accidents
- . Fire and explosion
- . Drowning
- . Miscellaneous

While no documentation was found, it is reported that many accidental deaths occur when alcohol is involved. Whether or not this factor is involved, the high rate of death from accidents and violence results in great part from the hazards to which the Indians' way of life exposes them.

The suicide rate among Indians is higher than among the population as a whole - 1.5 times the national rate for males and 2.0 times the national rate for females.

(6.4) Circulatory Diseases Are the Third Most Frequent Cause of Death Among Indians

As illustrated in Exhibit XVIII, the national death rate from circulatory diseases is approximately three times the Indian rate. However, these diseases are the third most frequent cause of death among Indians. In 1963, 133.8 Indian males and 89.9 Indian females per 100,000 population died of circulatory diseases. Arteriosclerosis accounts for almost 65% of all Indian deaths due to circulatory diseases.

(6.5) Diseases of Early Infancy Are the Fourth Most Frequent Cause of Death Among Indians

As indicated in Exhibit XVIII, the Indian death rate from diseases of early infancy is approximately three times the rate for all Canadians. Approximately 214 Indians per 100,000 died from these diseases in 1963.

Four diseases are the primary causes of death in early infancy:

- . Ill-defined diseases peculiar to infancy
- . Postnatal asphyxia and atelectasis
- . Infections of newborn
- . Birth injuries

(6. 6) Diseases of the Digestive System Are the Fifth Most Frequent Cause of Death Among Indians; Neoplasms, the Sixth

Exhibit XVIII indicates that the Indian rate of death due to digestive diseases is more than twice the rate for the total population. Gastroenteritis and colitis account for approximately 50% of all deaths due to diseases of the digestive system.

Neoplasms, while they cause death to Indians only half as often as to other Canadians, rank as the sixth most frequent cause of death in the Indian population.

(6. 7) Other Diseases Also Cause Death More Frequently Among Indians than Among Other Canadians, Although They Are Not Major Contributors to Indian Mortality Rates

Deaths are caused more frequently among Indians than among the total population by the following diseases:

Infective and parasitic diseases (including tuberculosis) cause death five times more often among Indians.

- . Senility and ill-defined diseases result in death five times more often among Indians.
- . Congenital malformations cause death among Indians twice as often.

2. MORBIDITY RATES OF INDIANS ARE HIGHER THAN THOSE OF OTHER CANADIANS, FOR MANY DISEASES

Comparison of the incidence of illness among Indians and others demonstrates that, while the two populations are afflicted by the same diseases, illness occurs far more frequently among Indians than in the population as a whole.

Because national data on the incidence of illness among Indians are not available, the following comparisons have, of necessity, been limited to Indians and non-Indians of British Columbia and Saskatchewan. In both provinces, the data are limited to illness that resulted in hospitalization and are given in terms of numbers of cases discharged or separated. Cases that were not hospitalized are not included. Although morbidity rates in Saskatchewan are limited to the insured population, 96% of the registered Indians in that province have hospitalization insurance. Rates for British Columbia include the entire registered Indian population.

(1) Illness Among Indians Occurs More than Twice as
Frequently as Among Other Canadians

During recent years, the rate of hospitalization for illness for Indians in British Columbia and Saskatchewan has increased while the rate for the rest of the population in these provinces has remained stable or has declined slightly, as indicated in Exhibit XXI, following this page. The sharp rise in Indian illness between 1966 and 1967 in British Columbia has not been explained or investigated.

Exhibit XXII, following Exhibit XXI, compares incidence of disease by specific diagnostic categories among Indians and non-Indians in the two provinces in 1966 and 1967.

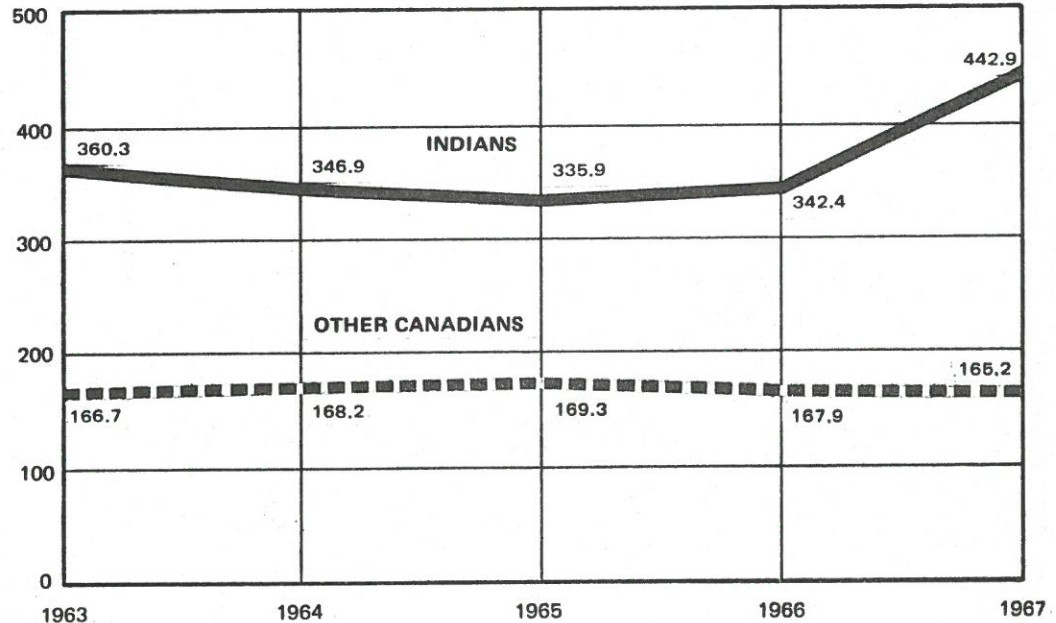
The five leading causes of hospitalization are similar for the two provinces and are not significantly different from the five leading causes of hospitalization of the rest of the population. Those causes are:

- . Diseases of the respiratory system.
- . Accidents and violence.
- . Deliveries and complications of pregnancy.
- . Diseases of the digestive system.
- . Diseases of the nervous system and sense organs.

EXHIBIT XXI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION OF REGISTERED INDIANS AND
OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967)
AND SASKATCHEWAN (1963-1966)**

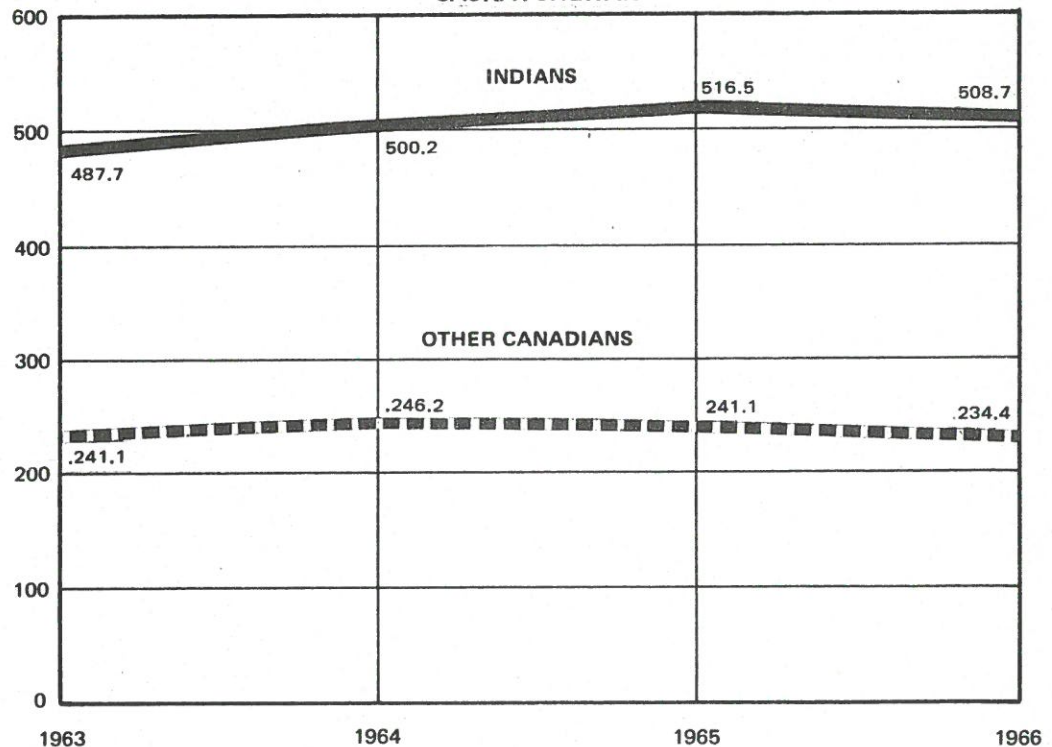
DISCHARGED CASES
PER 1,000 POPULATION

BRITISH COLUMBIA



PER 1,000 INSURED
SEPARATIONS

SASKATCHEWAN



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967, Annual Reports, Saskatchewan Hospital Service Plan, and Supplementary Statistical Tables, 1963-1966.

EXHIBIT XXII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION OF REGISTERED INDIANS AND
OTHER CANADIANS BY MAJOR DIAGNOSTIC GROUPS,
BRITISH COLUMBIA – 1967 AND SASKATCHEWAN – 1966**

Major Diagnostic Group	British Columbia Discharged Cases per 1,000 Population		Saskatchewan Separations per 1,000 Insured	
	Indians	Other Canadians	Indians	Other Canadians
Diseases of the Respiratory System	133.2	24.8	157.1	44.4
Accidents and Violence	61.4	19.1	46.9	18.5
Deliveries and Complications of Pregnancy	53.1	22.5	73.1	27.9
Diseases of the Digestive System	46.4	20.9	62.3	29.7
Diseases of the Nervous System and Sense Organs	36.5	8.7	20.4	10.2
Diseases of the Skin and Cellular Tissue	19.0	2.3	17.6	4.4
Infective and Parasitic Diseases	16.0	2.1	18.6	3.2
Diseases of the Genitourinary System	17.5	17.0	16.9	17.4
Diseases of the Circulatory System	17.5	13.7	9.7	18.3
Disease of the Bones and Organs of Movement	9.8	6.7	4.8	6.6
Symptoms, Senility, and Ill-Defined Conditions	7.3	3.4	9.0	6.9
Mental, Psychoneurotic, and Personality Disorders	6.7	5.0	4.6	5.3
Allergic, Endocrine System, Metabolic, and Nutritional Diseases	5.4	4.5	5.4	7.0
Neoplasms	4.6	10.6	4.2	10.1
Diseases of Early Infancy	3.0	0.3	3.9	0.7
Congenital Malformations	2.8	2.0	2.3	1.4
Diseases of the Blood and Blood-Forming Organs	1.7	0.8	1.5	1.4
Supplementary Classification for Special Admissions	1.0*	0.8*	50.4**	21.0**
Total	<u>442.9</u>	<u>165.2</u>	<u>508.7</u>	<u>234.4</u>

*Excludes newborns

**Includes newborns, consequently not listed as a leading cause of hospitalization

Sources: Statistics of Hospital Cases Discharged During 1967, British Columbia
Annual Report, Saskatchewan Hospital Service Plan, 1966, and
Supplementary Statistical Tables

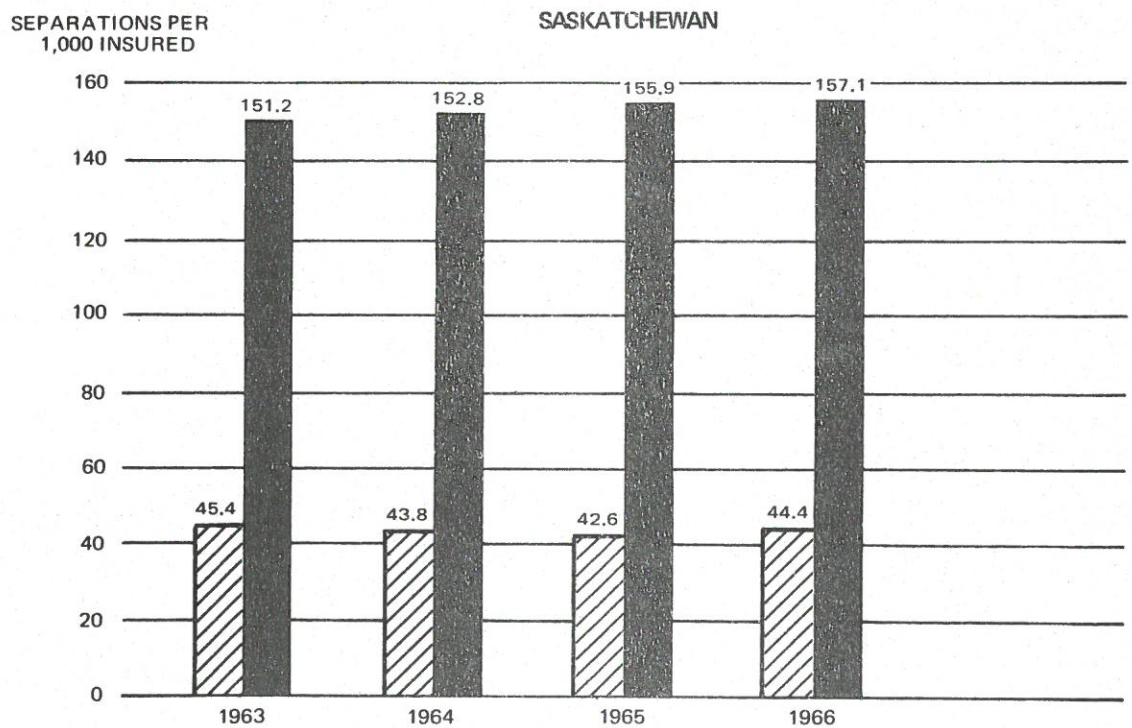
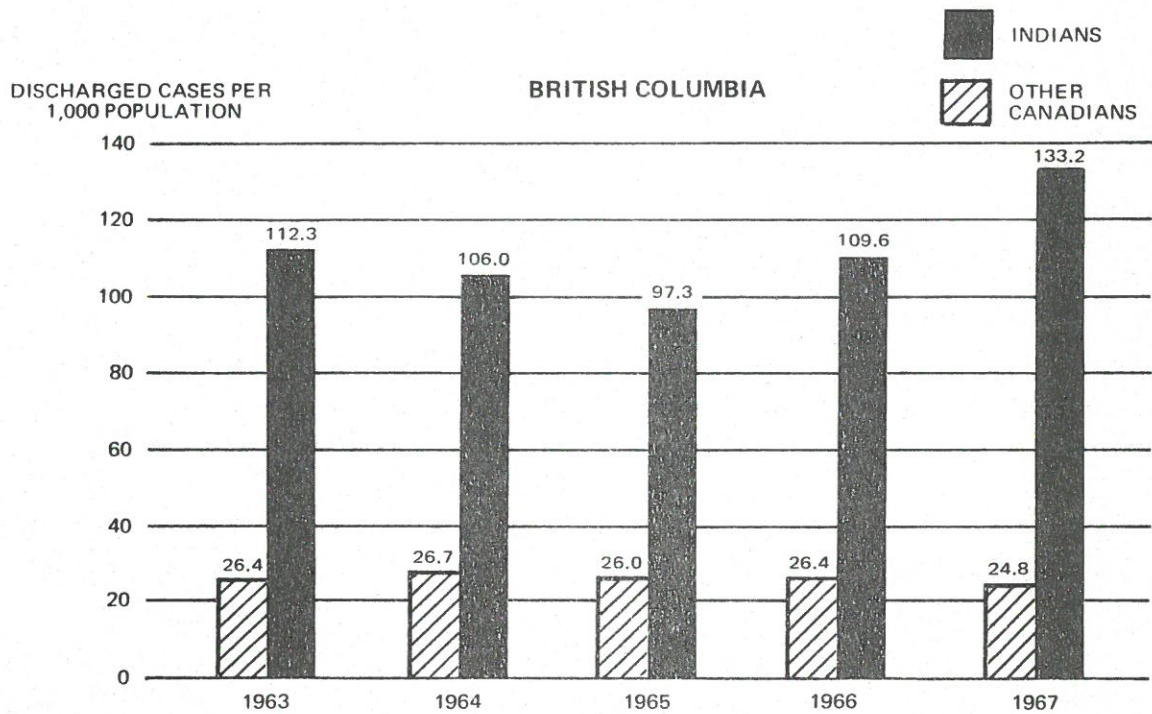
(1. 1) Respiratory Diseases Are the Leading Cause of
Illness Among Indians

Diseases of the respiratory system account for approximately 25% of all hospitalization among Indians. As shown in Exhibit XXIII, following this page, hospitalization for such diseases is substantially greater among Indians than among the rest of the population and in British Columbia was approximately five times more frequent among Indians in 1967. The incidence among Indians in Saskatchewan was approximately 3.5 times the rate for other Canadians. The high incidence of respiratory diseases among Indians reflects the poor environmental conditions in which they live and which render them more vulnerable to such diseases.

(1. 2) Accidents and Violence Are a Primary Reason for
Hospitalization Among Indians

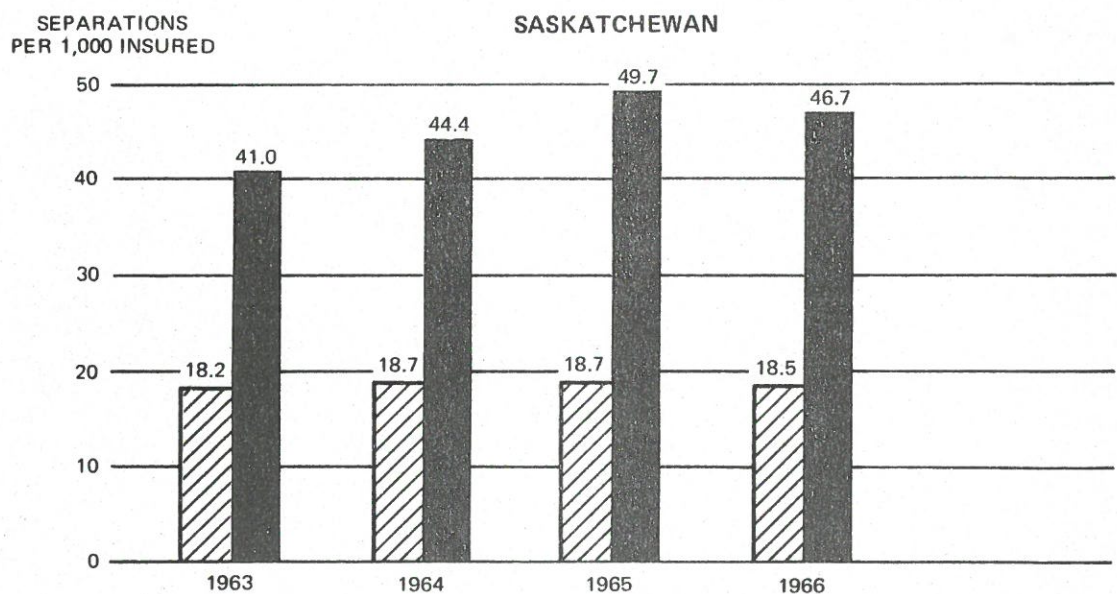
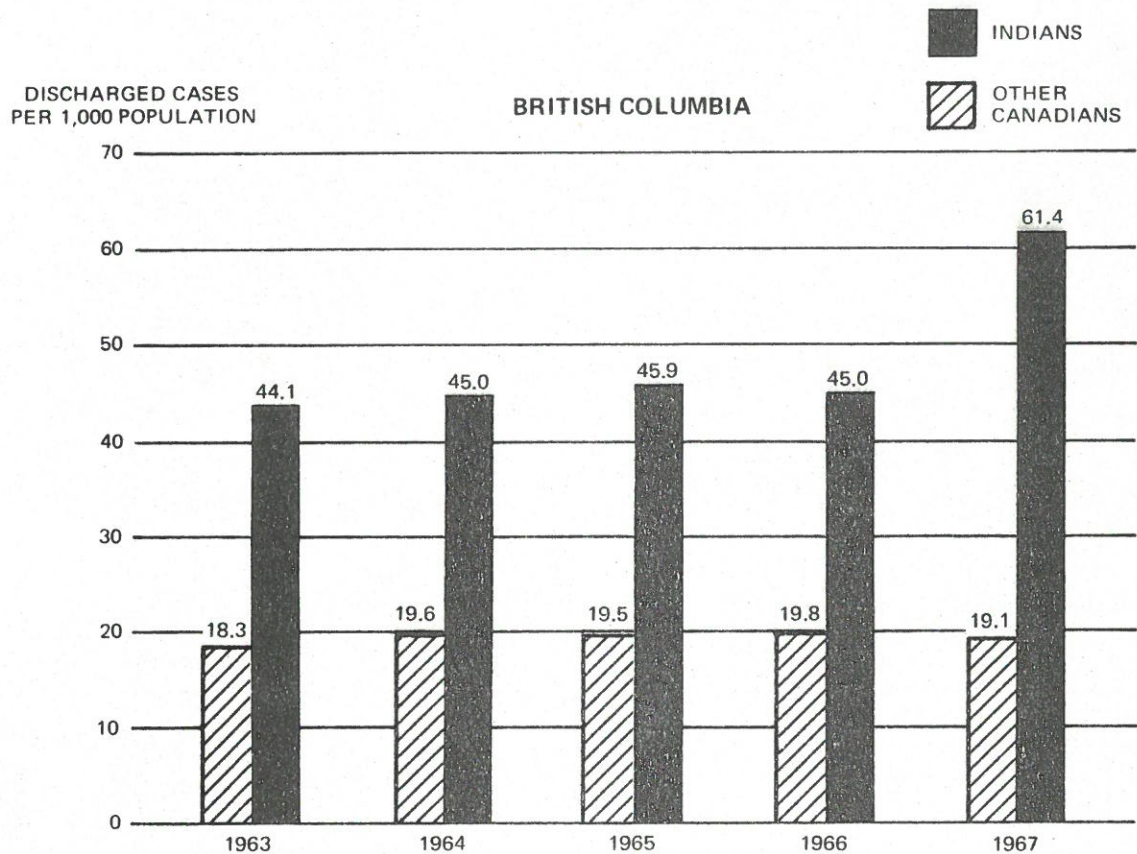
Exhibit XXII, previously presented, indicates the high incidence of hospitalization due to accidents. Exhibit XXIV, following Exhibit XXIII, indicates that the rate of hospitalization for accidents and violence among Indians is more than double the rate for non-Indians.

EXHIBIT XXIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR RESPIRATORY DISEASES
AMONG REGISTERED INDIANS AND OTHER CANADIANS
IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967, Annual Reports, Saskatchewan Hospital Service Plan, and Supplementary Statistical Tables, 1963-1966.

EXHIBIT XXIV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR ACCIDENTS AND VIOLENCE
AMONG REGISTERED INDIANS AND
OTHER CANADIANS IN BRITISH COLUMBIA
(1963-1967 AND SASKATCHEWAN (1963-1966))**



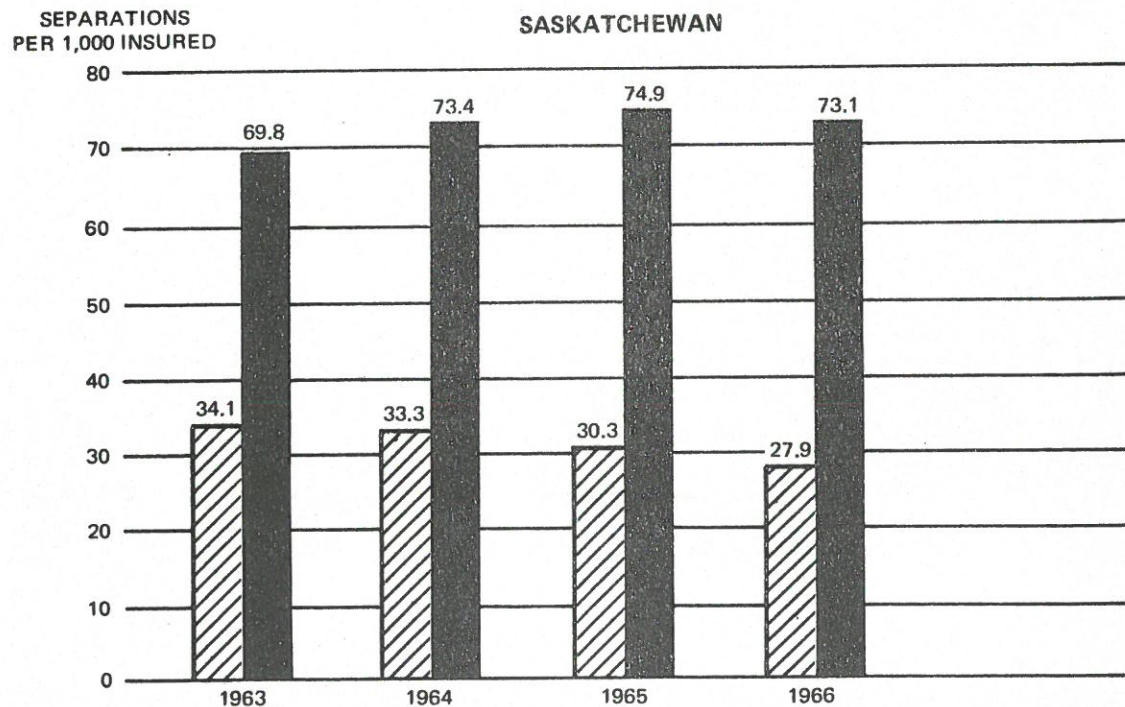
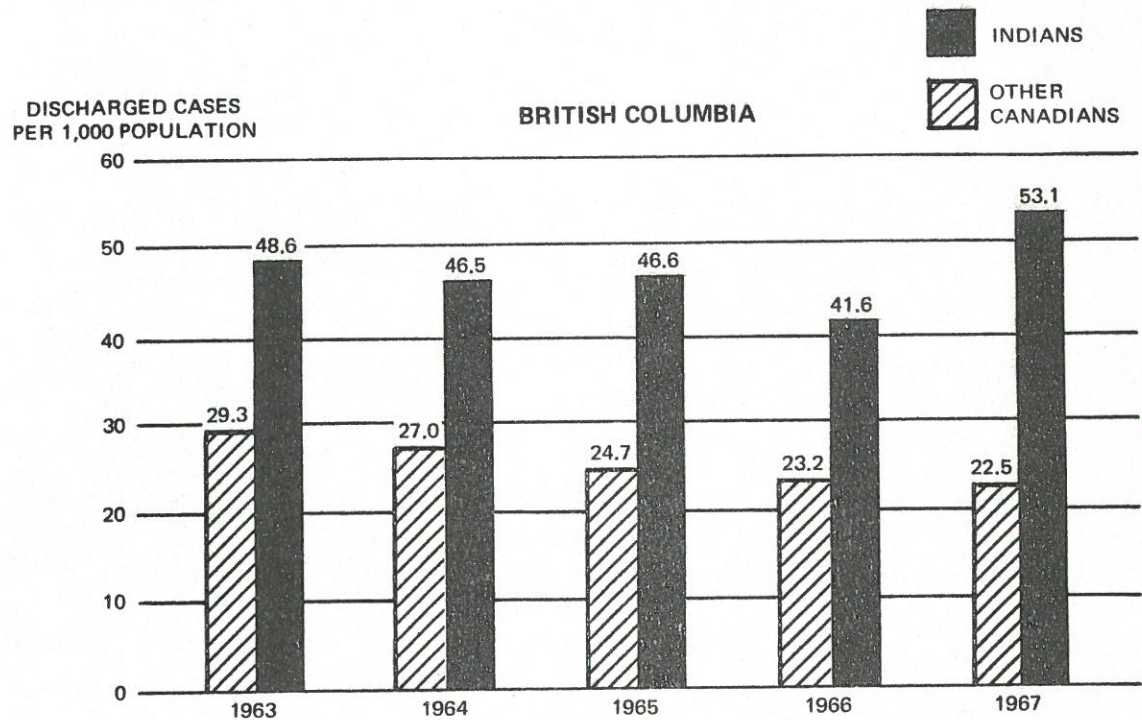
SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967
Annual Report, Saskatchewan Hospital Service Plan and Supplementary
Statistical Tables, 1963-1966

In every 1,000 of their respective populations, 61.4 Indians, as compared to only 19.1 other Canadians, were hospitalized because of accidents and violence in British Columbia in 1967. In Saskatchewan, that ratio was 46.7 for Indians compared to 18.5 for others in 1966. The very high incidence among Indians of hospitalization due to accidents largely reflects the more hazardous environment in which many Indian people live.

(1.3) Deliveries and Complications of Pregnancy Are Another Major Cause of Hospitalization Among Indians

Hospitalization of females for deliveries and complications of pregnancy occurs more than twice as frequently among Indians as among the rest of the population, as shown in Exhibit XXV, following this page. In British Columbia in 1967, 53.1 Indian women and only 22.5 non-Indian women were hospitalized for every 1,000 of the respective populations. The rates in Saskatchewan in 1966 were 27.9 for non-Indian women and 73.1 for Indians. The high Indian birth rate accounts for much of the greater incidence of hospitalization of Indians in this classification. While deliveries account for a large proportion of the separations, these rates cannot be construed as are most morbidity rates.

EXHIBIT XXV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR DELIVERIES
AND COMPLICATIONS OF PREGNANCY
AMONG REGISTERED INDIANS AND OTHER CANADIANS IN
BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967
Annual Report, Saskatchewan Hospital Service Plan and Supplementary
Statistical Tables, 1963-1966.

(1. 4) Diseases of the Digestive System Are Another Major Cause of Hospitalization Among Indians

Digestive system diseases occur among Indians at approximately twice the rate for others, as indicated in Exhibit XXVI, following this page. Illness from these causes occurred among Indians at a rate of 46. 4 per 1, 000 in 1967 in British Columbia and 62. 3 in Saskatchewan in 1966. Among non-Indians, the rate was 20. 8 in British Columbia and 29. 7 in Saskatchewan.

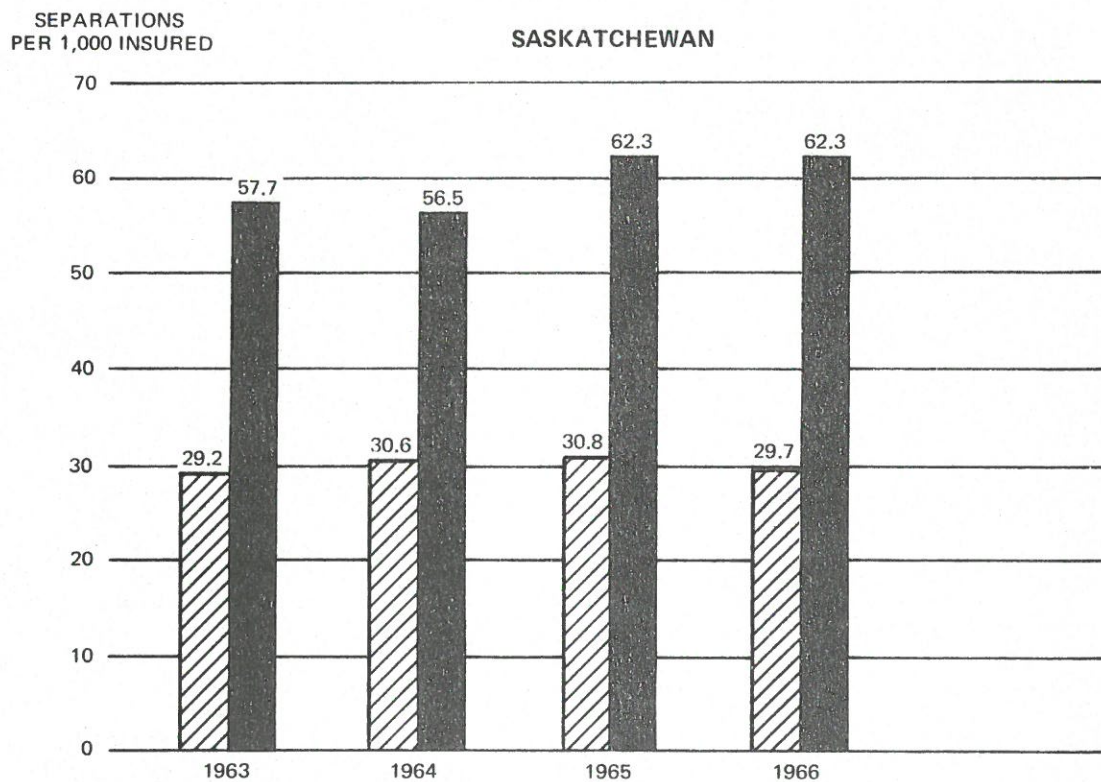
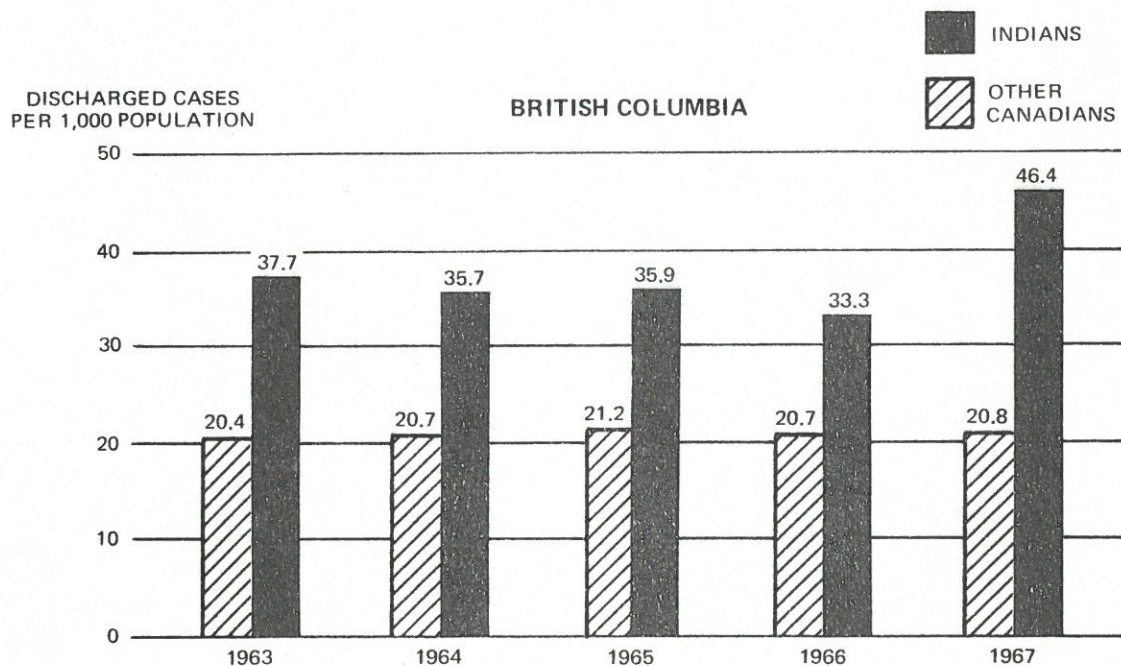
Gastroenteritis and colitis account for 65% of diseases of the digestive system in Saskatchewan. Gastroenteritis is a particular problem among infants.

The high incidence of this type of illness among Indians reflects the poor environmental conditions in which many of them live, especially the lack of adequate facilities for obtaining potable water and disposing of human and other waste.

(1. 5) The Incidence of Diseases of the Nervous System and Sense Organs Among Indians Is Considerable

Indians are hospitalized for diseases of the nervous system and sense organs twice as often as the rest of the

EXHIBIT XXVI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR DISEASES OF THE DIGESTIVE SYSTEM
AMONG REGISTERED INDIANS AND OTHER CANADIANS IN
BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967
Annual Report, Saskatchewan Hospital Service Plan and Supplementary
Statistical Tables, 1963-1966.

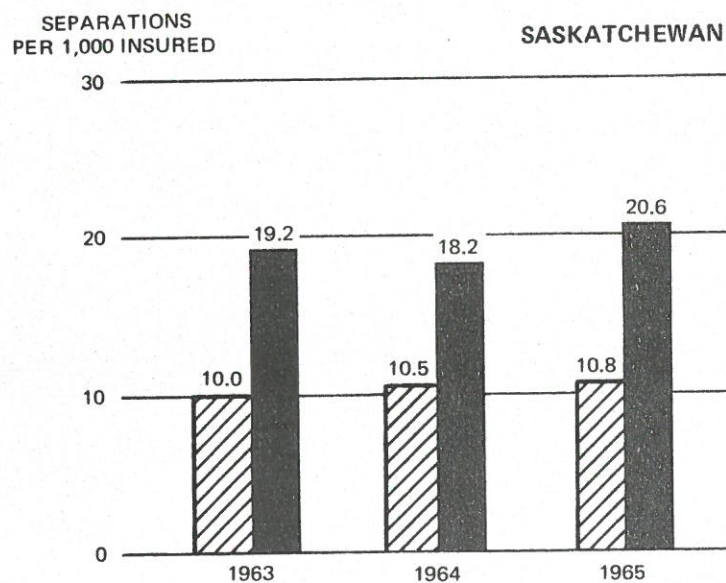
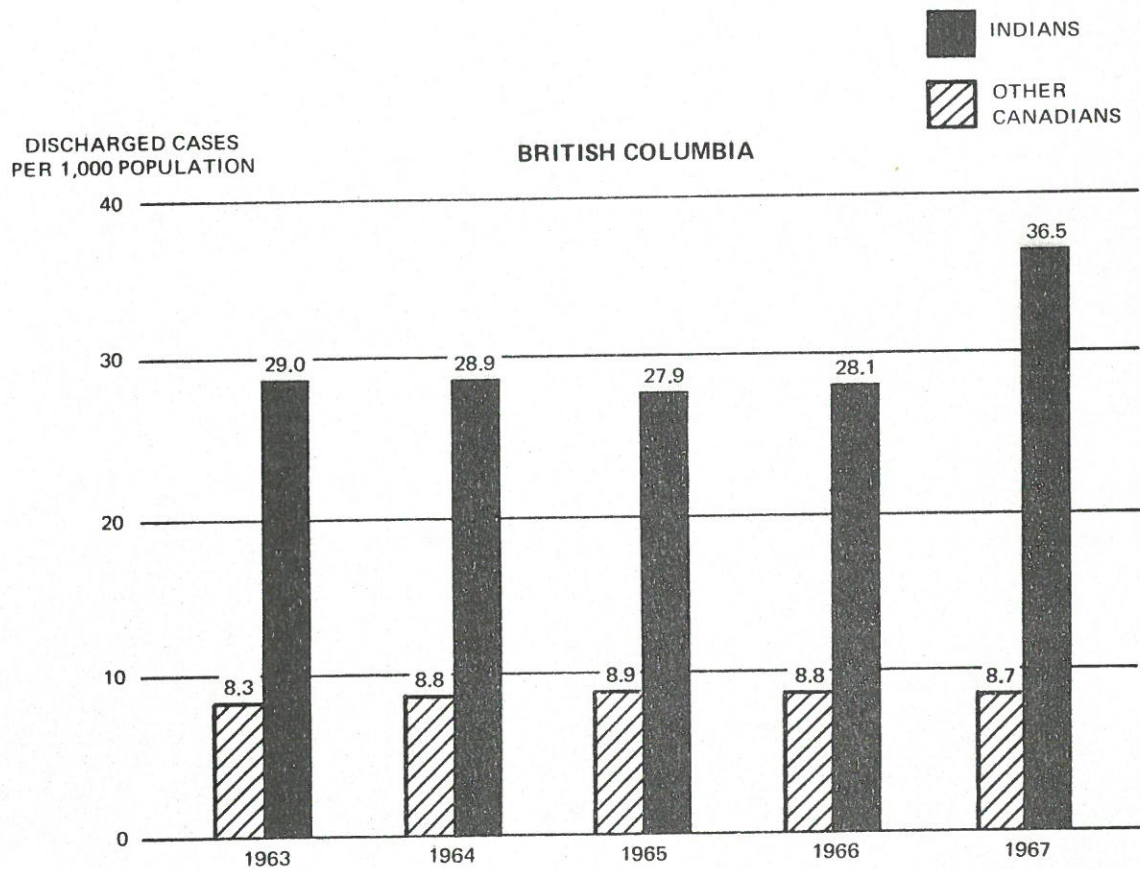
population in Saskatchewan, as indicated in Exhibit XXVII, following this page. In British Columbia, the difference in rates is still greater. For each 1,000 of the respective populations in British Columbia in 1967, 36.5 Indians were hospitalized for diseases of the nervous system, a rate four times greater than the 8.7 for non-Indians.

Diseases of the ear and mastoid process account for approximately two-thirds of all cases in this category among Indians in Saskatchewan.

(1.6) There Is High Incidence of Diseases of the Skin and Cellular Tissues Among Indians

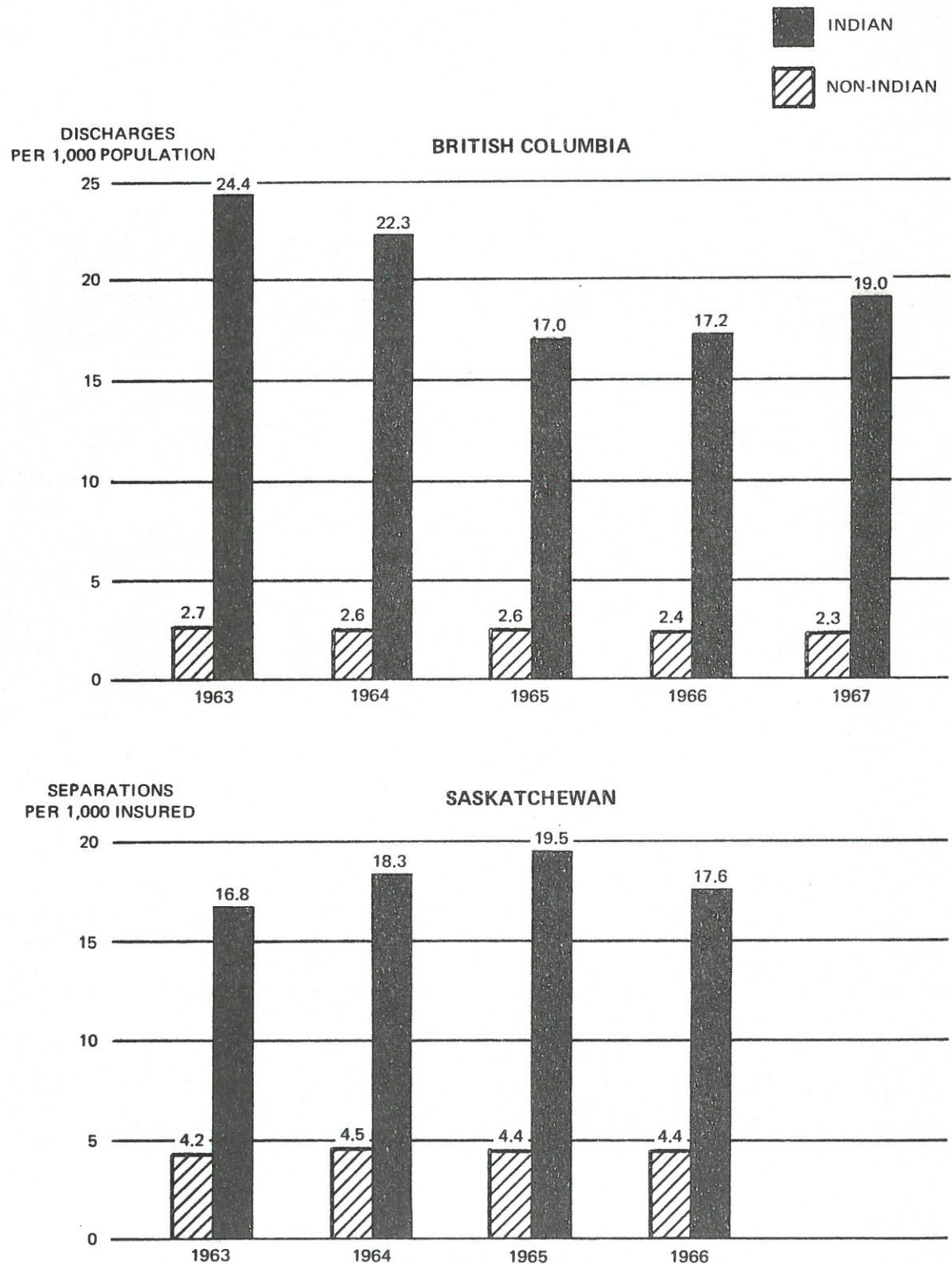
As shown in Exhibit XXVIII, following Exhibit XXVII, there is a high incidence of skin and cellular tissue diseases among Indians. In British Columbia, such diseases hospitalized Indians eight times more frequently than non-Indians in 1967; in Saskatchewan, four times more frequently in 1966. Infections of the skin and subcutaneous tissue account for approximately two-thirds of all cases hospitalized for this category in Saskatchewan. Many instances of diseases of the skin reflect the fact that the poor environment in which many Indians live makes basic personal hygiene difficult to practise.

EXHIBIT XXVII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR DISEASES OF THE NERVOUS SYSTEM AND
SENSE ORGANS AMONG REGISTERED INDIANS AND
OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967) AND
SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967
Annual Report, Saskatchewan Hospital Service Plan, and Supplementary
Statistical Tables, 1963-1966.

EXHIBIT XXVIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR DISEASES OF THE SKIN AND
CELLULAR TISSUES AMONG REGISTERED INDIANS
AND OTHER CANADIANS IN BRITISH COLUMBIA (1963-1967)
AND SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967
Annual Report, Saskatchewan Hospital Service Plan, and Supplementary
Statistical Tables, 1963-1966

(1. 7) Infective and Parasitic Diseases Are Another Major Cause of Hospitalization Among Indians

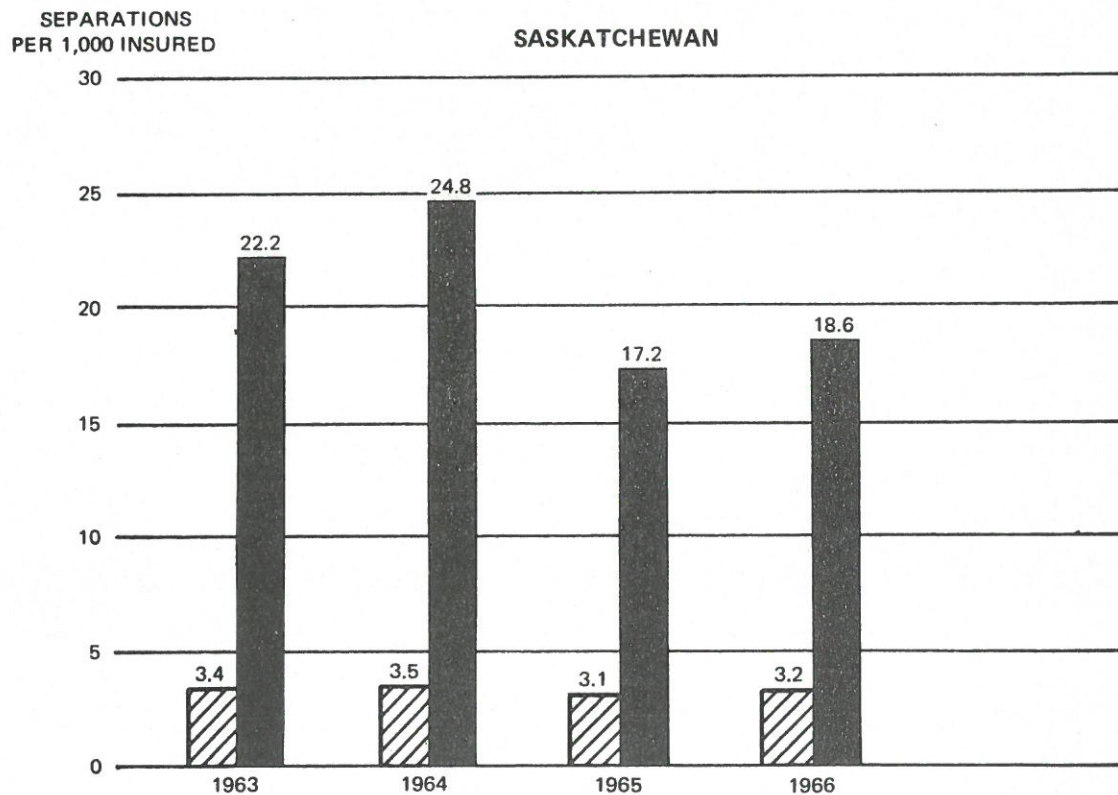
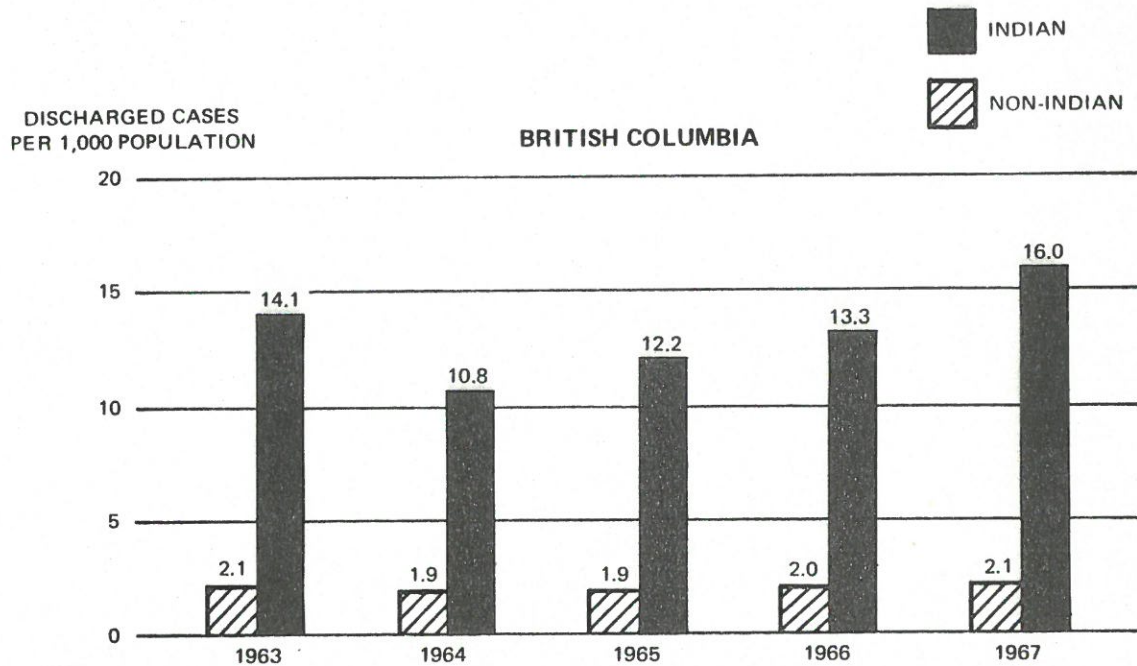
Indians experience a considerably higher incidence of infective and parasitic diseases than other Canadians, as shown in Exhibit XXIX, following this page. Tuberculosis is no longer the major cause of hospitalization in this category among Indians, as it had been prior to 1950. At present, viruses and other infective, bacterial, spirochetal, rickettsial or parasitic diseases account for 90% of all hospitalized cases among Saskatchewan Indians.

(1. 8) Dental Caries and Various States of Depression Appear To Be Significant Health Problems Among Indians

Personal observations and reports indicated that dental problems are a major cause of discomfort and illness among Indians.

Significant incidence of depression, despondency, and neurosis among Indian people was observed in field visits to the Middle North. While Exhibit XXII, previously presented, indicates that the rate of hospitalization due to mental disorders is approximately equal for Indians and other Canadians, this does not indicate the prevalence of minor disorders for which persons are never hospitalized.

EXHIBIT XXIX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HOSPITALIZATION FOR INFECTIVE AND PARASITIC DISEASES
AMONG REGISTERED INDIANS AND OTHER CANADIANS
IN BRITISH COLUMBIA (1963-1967) AND SASKATCHEWAN (1963-1966)**



SOURCES: Statistics of Hospital Cases Discharged, British Columbia, 1963-1967 Annual Report, Saskatchewan Hospital Services Plan, and Supplementary Statistical Tables, 1963-1966.

(2) Although the Average Length of Hospital Stay Is Approximately Equal for Indians and Non-Indians in British Columbia, Indians Stay Significantly Longer for Certain Diseases

As shown in Exhibit XXX, following this page, the total average length of hospital stay was only slightly greater for Indians than for the rest of the population in British Columbia. However, Indians had longer hospital stays than non-Indians for four main disease categories.

- . For congenital malformations, the average length of stay of Indians was more than twice that of whites.
- . For certain diseases of early infancy, the Indians' average length of stay was twice that of whites.
- . For diseases of the bones and organs of movement, Indians stayed an average of nearly four days longer than whites.
- . For diseases of the respiratory system, the average length of stay of Indians was more than four days longer than that of whites.

It would appear, from observations made on field trips and from analysis of available data, that the average stay in these instances may be longer because the Indian patient does not recognize the symptoms of illness and seek hospital admission until his condition has become acute. Furthermore, the

EXHIBIT XXX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**AVERAGE LENGTH OF STAY IN HOSPITAL
BY MAJOR DIAGNOSTIC GROUPS FOR
REGISTERED INDIANS AND OTHER CANADIANS,
BRITISH COLUMBIA
1967**

Major Diagnostic Group	Average Length of Stay	
	Other Canadians	Indians
Infective and Parasitic Diseases	11.6	12.2
Neoplasms	14.6	16.6
Allergic, Endocrine System, Metabolic, and Nutritional Diseases	12.1	11.9
Diseases of the Blood and Blood-Forming Organs	14.2	16.1
Mental, Psychoneurotic, and Personality Disorders	12.4	5.7
Diseases of the Nervous System and Sense Organs	12.8	12.2
Diseases of the Circulatory System	15.1	13.9
Diseases of the Respiratory System	5.7	9.9
Diseases of the Digestive System	9.7	9.4
Diseases of the Genitourinary System	7.5	9.9
Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium	5.9	5.9
Diseases of the Skin and Cellular Tissue	9.2	11.0
Diseases of the Bones and Organs of Movement	14.2	18.0
Congenital Malformations	11.8	26.3
Certain Diseases of Early Infancy	11.1	24.1
Symptoms, Senility, and Ill-Defined Conditions	5.5	6.1
Injuries and Adverse Effects	10.9	11.2
Supplementary Classification for Special Admissions (excluding newborn)	4.8	11.7*
Total Average Length of Stay	9.71	10.4

*Based on fewer than 50 cases

Source: Statistics of Hospital Cases Discharged, British Columbia, 1967

isolation of many Indian communities may cause delay in bringing a patient to a hospital, with the result that he enters the hospital more acutely ill than does the non-Indian patient. In addition, there is often a delay in discharging Indian patients from the hospital when they live in isolated communities and have difficulty obtaining transportation home. Longer hospital stays for Indians may be required in some cases if Indians, because of constitutional differences, respond differently to disease and medication.

Doctors may tend to hold the Indian patient in the hospital longer in recognition of the poor living conditions to which he must return when he is discharged. This may be particularly true with very young children, for whom poor environmental conditions present a greater hazard to health. It was observed that as many as 40% to 80% of the patients in hospitals visited during field trips were Indian children under the age of three. This high rate of hospitalization of young Indian children served to explain further the long length of stay of Indians, particularly for those diseases related to environmental conditions.

3. POOR ENVIRONMENTAL CONDITIONS ARE THE MOST
IMPORTANT CAUSE OF THE HIGH MORBIDITY AND
MORTALITY RATES AMONG INDIANS

Although environmental conditions of Indians vary with the section of the country and have been observed to be more acutely hazardous to health in the Middle North, decidedly substandard living conditions exist in almost all Indian communities. Many Indian homes are substandard and overcrowded and lack the basic amenities conducive to good health that are found in other Canadian homes. Such conditions contribute to the high incidence of illness, make recovery from illness more difficult, and make recurrence after treatment more likely. These conditions also contribute to the high mortality rate among Indians.

(1) Indian Homes Are Generally Substandard

Many Indian homes are below national standards of quality. Less than 50% of all Indian homes were considered of good quality and good condition in a 1966 survey conducted by the Indian Affairs Branch. By comparison, the 1961 census estimated that over 94% of all homes in Canada were in good condition or in need of only minor repair. While the comparison reliably indicates that a significant difference exists between the quality of the homes of Indians and other Canadians, the precise extent of that difference cannot be determined because the figures of the two surveys are not strictly comparable.

Often the residences in which Indians live are primitive. At present, approximately 20% of the homes in Indian communities are log structures.

Of the more modern homes built by contractors for the Indian people under Indian Affairs Branch programs, a significant portion have not been of anticipated quality. In many instances, Indian homes were observed to have been constructed with inferior grades of materials, and many were poorly constructed and poorly finished. Indian homes have become even more substandard when they have not been maintained and repaired adequately.

(2) Overcrowding Exists in Many Indian Homes,
Particularly in the Middle North

There are significantly fewer homes than families in Indian communities. These homes, smaller than the average Canadian home, serve in many instances as multiple-family households and must house larger-than-average families. The majority of homes observed, particularly in the Middle North, were overcrowded. In the nation as a whole, there are approximately 105 families for every 100 homes. In Indian communities, the ratio is approximately 120 families for each 100 homes.

There are 5.3 rooms in the average Canadian home.

In Indian communities, the average home has 3.6 rooms, and approximately 46% of all Indian homes have three rooms or less.

In 1966, the average number of persons per Indian family was 6.4, compared to an average family size of 3.7 for the nation as a whole. The average number of persons living in each Indian home is 2.1 times greater than the national average, and the average number of persons per room in Indian communities is about 3.0 times the national average. Such close proximity of large numbers of persons in Indian homes makes difficult the prevention of disease and accelerates the spread of disease that does occur.

(3) Most Indian Homes Lack the Basic Amenities Found in the Average Canadian Home

Exhibit XXXI, following this page, indicates that a significantly large proportion of Indian homes lack electric power, telephones, modern heating, and basic sanitary facilities.

In 1966, 43% of Indian homes were without electricity. This lack was observed to be far more acute in the Middle North than in southern reserves, where electricity was

EXHIBIT XXXI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**PERCENT OF AVAILABILITY OF BASIC AMENITIES IN
THE HOMES OF REGISTERED INDIANS AND CANADIANS
1966**

<u>Basic Amenities</u>	<u>Percent of Availability in Registered Indian Homes</u>	<u>Percent of Availability in All Canadian Homes</u>
Homes with Electricity	57%	99%
Homes with Means of Garbage Disposal	14	98
Homes with Running Water	20	92
Homes with Indoor Toilets	12	90
Homes with Indoor Baths	10	85
Homes with Telephones	16	88
Homes with Heating Equipment:		
Wood Stove Space Heater	85	13
Gas, Oil, Electric Space Heater	5	12
Furnace (coal, oil, gas)	10	70
Other	-	5

Sources: Indian Affairs Branch, Department of Indian Affairs and Northern Development
Dominion Bureau of Statistics

available in nearly every location visited. The lack of electric power, especially in the Middle North, precludes the use of electric lighting, small electric appliances, and refrigerators. The consequent lack of food storage and preparation facilities limits the variety of the foods Indian families may use, and diets often are concentrated in a limited number of items that do not meet minimum dietary standards.

Sanitation systems for the removal of human waste and garbage, and water systems for drinking and bathing exist in some communities on southern reserves but are virtually nonexistent in most areas of the Middle North. Where there are such facilities in the Middle North, they are generally inadequate.

In some areas of the Middle North, soil and terrain conditions have altogether prevented the installation of water systems. The random placement of homes and the large distances between them frequently make the installation of community water and sewerage systems extremely costly, if not impossible. The difficulty encountered in obtaining potable water compounded by the problem of heating it, discourages such basic hygienic practices as bathing and dishwashing. The high incidence of diseases of the skin among Indians may be directly attributable to these conditions.

The extent to which general uncleanness of persons, surroundings, food, dishes, and the like resulting from the lack of water and sewerage systems contributes to the incidence of disease cannot be measured directly but can be presumed to be great.

The lack of adequate heating, ventilation, and insulation, observed particularly in many Indian homes in the Middle North, creates a generally unhealthy and unsafe environment, especially for children.

(4) Many of the Illnesses Most Prevalent Among Indians Can Be Attributed Directly to Poor Environment

The relationship of the poor environment of Indians to the high incidence of disease and death is complex. Such conditions as poor heating, inadequate clothing, and poor diet reduce resistance to disease. Inadequate refrigeration, water, and waste removal systems breed germs and vectors which are spread more rapidly in overcrowded conditions. While the interrelationships between factors are too intricate to allow direct correlation of cause with disease, the following relationships of environmental

conditions and diseases prevalent among Indians can be seen to exist.

- . Respiratory diseases, which are the leading cause of both illness and death among Indians and which occur among Indians at a rate three times that for other Canadians, often are caused by insufficient heating of the homes, lack of adequate clothing, and overcrowded conditions.
- . Diseases of early infancy are the fourth most frequent cause of death of Indians and kill Indian children at a rate three times the national rate. Infant morbidity and mortality rates are higher where insufficient diet and an unhealthy environment exist.
- . Diseases of the digestive system, specifically gastroenteritis and colitis, occur more often when pure water is not available. At present, Indian deaths due to digestive diseases, of which half are caused by gastroenteritis and colitis, occur at a rate more than twice that for the total population.
- . Unsanitary water and food, with poor waste disposal, provide breeding grounds for germs and vectors causing infective, parasitic, and skin diseases. Deaths caused by such diseases are five times more prevalent among Indians than among the total population.

Deaths and diseases from all causes are much more prevalent in unsanitary, overcrowded living conditions.

(5) Attempts Are Being Made To Improve the Housing and Sanitation Facilities in Indian Communities

Early in 1965, the federal government announced plans for the expenditure of \$112,000,000 over a five-year period for the physical improvement of Indian communities. Subsequently, there was a cutback in funds and the program was extended to seven years to allow established objectives to be met. The program provides assistance for constructing homes, improving roads, and establishing safe water supplies, sanitation facilities, and electric power systems in Indian communities. Exhibit XXXII, following this page, indicates the improvements and the expenditures made under this federal program in its first two years.

4. MANY INDIANS HAVE LITTLE UNDERSTANDING OF THE MEANING OF GOOD HEALTH BECAUSE OF CULTURAL DIFFERENCES AND EDUCATIONAL DEFICIENCIES

Many Indians exhibit little awareness of what is meant by good health and they tend to both overutilize and underutilize health care resources. Medical care is often sought for minor problems that could be self-treated. On the other hand, Indians frequently fail to recognize significant symptoms and delay seeking treatment until they are acutely ill.

EXHIBIT XXXII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
PHYSICAL IMPROVEMENTS PROGRAM OF THE
INDIAN AFFAIRS BRANCH
1966-1967 and 1967-1968

	<u>1966-1967</u>	<u>1967-1968</u>	<u>Percentage of Increase</u>
<u>Housing</u>			
Expenditures	\$ 7,996,786	\$13,235,127	65.50%
Number of Houses Completed	1,769	2,005	13.34
Average Cost per Unit	\$ 4,500	\$ 6,600	46.66
<u>Road Systems</u>			
Expenditures (maintenance and construction)	\$ 2,451,000	\$ 3,217,000	31.79%
<u>Electrification</u>			
Expenditures	\$ 959,000	\$ 949,000	-1.05%
Number of Houses Receiving Electricity	1,569	2,808	176.00
<u>Water and Sanitation Systems</u>			
Expenditures	\$ 1,483,000	\$ 2,475,000	66.89%
Number of Houses Receiving Pressurized Water	492	821	66.86
Number of Houses Receiving Septic Tanks	441	585	32.65
Number of Houses Receiving Indoor Toilets	384	749	95.05
<u>Total Expenditures for Physical Improvements</u>	<u>\$12,897,786</u>	<u>\$19,876,127</u>	<u>54.32%</u>

Source: Indian Affairs Branch, Department of Indian Affairs and Northern Development

(1) Cultural Differences Have Been Partly Responsible for the Lack of Health Awareness of Many Indians

The traditional Indian way of life reflects a culture that differs from that of other Canadians in the concept and value of such things as time, nature, and material accumulation. In the traditional culture, the passage of time is reckoned in terms of seasons, not in hours, days, or months. Nature is regarded as uncontrollable, and it is believed that man must adjust his life to its vicissitudes.

Changes in cultural orientation are taking place among the Indian people, but those who have retained elements of the old culture have found it difficult to comprehend modern concepts of health needs and medical treatment and may resist health services. In certain instances, Indians continue to rely on aboriginal medical practices.

Indians who believe that man is unable to alter or control nature are not motivated to take preventive health measures or to seek medical treatment. Indians living in the Middle North are more isolated than those on southern reserves and generally tend to have more ties with their original cultural beliefs.

Their culture has encouraged Indian families to remain in their home communities, which often are remote from adequate health care facilities. Indians traditionally maintain strong ties of family and kinship. The band represents a kind of extended family and grandparents, aunts, and uncles tend to be thought of as members of the immediate family. There is considerable reluctance to break these larger family ties by moving the primary family unit of father, mother, and children to a location where opportunities for advancement and more modern facilities of all kinds would be available.

Because of the cultural and language gap between themselves and those who provide health care and health education, many Indians tend to regard modern medicine as something foreign.

(2) Educational Deficiencies Also Contribute to the Lack of Health Awareness Among Indian People

There is a direct relationship between educational achievement and awareness of the importance of good health. The low educational level of many Indian people limits their ability to understand the basic biological concepts underlying good health. Current problems in educating Indian children also hamper attempts to offer public health instruction in schools and communities.

In sparsely populated areas, where children must leave home to attend high school, 90% of the children do not attend high school and the majority of those who do return to the reserve within one year.

Problems of Indian education are compounded by the fact that many children enter school unable to communicate in English. The teachers, in turn, usually cannot speak the language of the band. While the issue is not settled, there is a considerable body of opinion which believes that conducting classes in English rather than the native language during the early grades limits educational achievement.

Indians often do not respond to public health education because they do not fully understand what is being taught. Health education curricula were developed initially for non-Indian students and do not take into account differences in Indian students' culture, interests, and abilities and the possible inadequacies in their current level of educational achievement.

More effective health education programs could be used to instruct both adults and children in:

- . Proper personal hygiene habits
- . How to create and maintain a healthy environment

- . How to recognize and prevent illness
- . When medical attention is required and should be obtained
- . Home economics and nutrition

5. THE INDIANS' STATE OF ECONOMIC DEPENDENCY CONTRIBUTES TO THEIR HEALTH PROBLEMS

Lack of employment, low income, and the resulting reliance on welfare severely limit the Indian people's resources for maintaining good health and provide little motivation for improving living conditions and health status.

(1) There Is a High Level of Unemployment and Under-employment Among Indians

Many Indians, particularly in the Middle North, have retained their traditional occupations of hunting, fishing, and trapping, which do not provide sufficient incomes to support families. Nearly 50% of all jobs held by Indians are concentrated in low paying seasonal occupations and industries. The average duration of employment per year for Indians is less than half that for the total population. In 1965, it was estimated that Indians were employed an average of 4.8 months per year, compared to an average of 11.5 months for the total population.

(2) Annual Incomes of Indians Are Far Below Those of Other Canadians

A survey conducted in 1965 by the Indian Affairs Branch showed that the average yearly earnings of Indian workers ranged between \$1, 000 and \$1, 500, as compared to an average yearly income in excess of \$4, 000 for workers in the population as a whole. Only 11. 5% of Indian workers earned \$4, 000 or more, while approximately 55% earned less than \$2, 000 a year.

(3) Welfare Payments Are a Major Source of Income for a Large Number of Indian Households

In 1968, 40% of the Indian population received some form of welfare assistance as compared to about 6% of the total population. In the north of Saskatchewan, welfare payments ranged from 20% to 80% of total income in more than half of the households.* In northern areas, where many Indians earn less than \$500 yearly, welfare allowances have become a primary source of income.

The indigence of many Indians often leaves them unable to improve the poor environmental conditions in which they live and which significantly contribute to the high morbidity and

* The Indians and Metis of Northern Saskatchewan,
Center for Community Studies, Saskatoon, p.3.

mortality rates. Their dependence on welfare and the idleness due to lack of employment are likely related to the frequency of despondency and neurosis observed. Unemployment detracts from one's sense of worth. Indians who are unemployed have nothing at stake on which day-to-day good health depends. In this sense, economic circumstances do little to motivate Indians to maintain good health, nor do they provide Indians with the financial resources to do so.

* * * * *

The health status of registered Indians is below that of the rest of the country, as indicated by comparisons of mortality and morbidity statistics for the two populations.

As compared to other Canadians, Indians die at a higher rate per thousand and at a younger average age. At birth, their life expectancy is approximately ten years less than that of the rest of the population, and there is more infant mortality.

Comparison of hospitalization rates further indicates that the state of health of Indians is poorer than that of other Canadians. The same diseases afflict Indians and non-Indians, but these diseases occur with greater frequency among Indians. For example, diseases

of the respiratory system, the leading cause of hospitalization among both Indians and non-Indians, occurred approximately five times more frequently among Indians than among others in British Columbia. In Saskatchewan, respiratory diseases hospitalized Indians at 3.5 times the rate for other Canadians.

The conditions in which many Indians live, particularly in the Middle North, are found to be the most important cause of the high rates of mortality and morbidity. Inadequacies in housing and sanitary facilities, overcrowding, low incomes, and the isolation of their communities are among the factors that contribute to the health problems of the native people. Cultural beliefs and inadequacies in education in some instances contribute to a lack of awareness of health needs and thereby affect both the health of Indians and the degree to which they seek out and make use of the health services available to them.

The extent to which such environmental, economic, cultural, and educational factors are likely to change will have a major influence upon the health status of Indians and will be pertinent to decisions about what kinds of health services ought to be provided and about how, where and by whom they should be provided. The assessment of the Indians' health status that was presented in this chapter will contribute to the identification of areas which should receive high priority for improvement

of health programs. The following chapter evaluates the adequacy of the health services that are presently available to registered Indians in comparison to the health needs that have been identified.

III. THE HEALTH RESOURCES AVAILABLE TO INDIANS

III. THE HEALTH RESOURCES AVAILABLE TO INDIANS

Canada's resources to improve the health status of the Indian people - for meeting their health and dental needs, for improving their living conditions, and for raising their levels of health awareness - comprise a vast and complex network. The strengths of that complex will serve as a base from which improved health services can be developed. Its inadequacies must be identified and improved and its various components fully co-ordinated if the increasing demands for more and better health care are to be met.

The problems inherent in the placement of health services to Indians in an organization separate from provincial and federal agencies providing other health and health-related services are beginning to be met. There is presently a degree of informal co-operation and reciprocation between the Medical Services Branch and other agencies, governments, universities, and associations, but the informal nature of most such arrangements has forestalled planning for the comprehensive provision of service to Indians. The present review of the health resources available to Indians is based upon observations made primarily in the Middle North, supplemented by interviews and the review of documents pertinent to resources available in the country as a whole.

For this reason, subsequent evaluation of the adequacy of health care facilities pertains most directly to the Middle North, but conclusions are generally applicable to the entire Indian health services program. For further reference, specific descriptions of health services in those Indian communities visited in the sample area are included in Appendix B.

Whether Indians receive health services which are equal to what might be anticipated by other Canadians living in comparable communities or disadvantaged areas in the Middle North is difficult to determine. Indians and non-Indians in the Middle North, even within the same settlement, generally do not live in comparable communities or circumstances, and individual communities (whether Indian, metis, or other Canadian) vary greatly in the health services available to them. As a result, it is possible to cite individual instances in which either Indians or non-Indians received decidedly better or worse health services.

In comparing Indian and metis settlements where the white population is relatively small, it appears that registered Indians receive equal or better care than that provided to the metis population. However, this conclusion is based on a limited observation of metis communities and must be made and applied with caution.

In those cases where Indians are living in the same communities as whites and receiving health services from the same sources, Indians appeared to have equal access to the services. In some places, such

as Sioux Lookout, Ontario, Indians and non-Indians in the same community use separate health delivery systems. In these cases, however, it was not possible to judge the relative quality of the two systems and to determine whether one group receives better care than the other.

In total, it appears that even though the health services provided for registered Indians are less than adequate, the services that are available to them are generally equal to those available to other Canadians living in the Middle North, considering relative degrees of isolation. Regardless of the comparability of the health services, however, the most important question is how the health status of the Indian people can be improved. Certainly, the health needs of Indians have been demonstrated to be much more acute than those of other Canadians and the alleviation of these needs depends upon the intensification of efforts to deliver quality health care to them.

The following sections present a review of the existing health programs, services, and resources available to Canadian Indians. Strengths and areas for improvement are identified so that high priority objectives, goals, and recommendations derived from them may be set forth in the following chapters.

1. RESPONSIBILITY FOR INDIAN HEALTH AND HEALTH-RELATED SERVICES HAS NOT BEEN FULLY CLARIFIED BY STATUTE AND IS DIVIDED AMONG VARIOUS FEDERAL AND PROVINCIAL AGENCIES AND THE INDIANS THEMSELVES

In the absence of legislation which clearly defines responsibility for Indian health services, the federal government has come to provide direct health care services in areas where such services cannot be obtained from other sources. In areas where some conventional sources of health care do exist, and in instances where services related to health are provided by disparate agencies, a policy of shared responsibility for providing overall health care to Indians has evolved. The sharing of responsibilities is in some cases formal, in many cases informal in nature and the practice has led to poor co-ordination and fragmentation in the provision of health and related programs.

(1) The Division of Federal Responsibility for Indians Between the Department of Indian Affairs and Northern Development and the Department of National Health and Welfare Has Resulted in Less Than Optimal Co-ordination

The division of related responsibilities between the two departments began in 1945, when authority for providing for health care for Indians was transferred from the Indian Affairs Branch to the Medical Services Branch of the Department of National Health and Welfare.

At that time, the Medical Services Branch began to provide the following kinds of health care services to Indians.

- . Health education
- . Diagnosis
- . Treatment
- . Rehabilitation

All other kinds of services for Indians remained the responsibility of the Indian Affairs Branch.

- . Economic development
- . Housing
- . Sanitation
- . Education
- . Welfare

If the health of registered Indians is to be improved, optimal co-ordination of the two departments will be needed to achieve improvement in three highly interrelated areas. The environmental and economic conditions of Indian communities, the lack of health awareness, and the medical and dental health of Indians have been seen in previous chapters to be closely related and it is doubtful that attempts to improve the Indians' health status will succeed if their living conditions and awareness of health needs are not also improved.

While housing, sanitation, employment, education, and health are inseparable aspects of Indian existence, responsibility for improvements in these areas is divided between two separate organizations. Progress in improving the overall quality of Indian life, including health, has been retarded where co-ordination between the departments has not been sufficient.

The lack of a clear definition of responsibilities for the two departments, combined with the inherent overlapping of aspects of Indian life, has resulted in general confusion regarding the appropriate functions of each department. The fact that final responsibility for Indian affairs as a whole falls to neither department has given rise to a tendency for each department to fault the other when problems occur. Furthermore, the sharing of such highly related responsibilities creates potential for less than full effort on the part of either agency.

The present interdepartmental committee has been unable to effect the needed co-ordination between the Medical Services Branch and the Indian Affairs Branch. The major efforts of the interdepartmental committee have dealt with details of operations of the two departments. Department objectives and programs have not been effectively co-ordinated and the result

has been fragmentation of the Indian health program. It appears that the co-ordinating function needs to be carried out at a higher organizational level in the government.

- (2) Provincial Hospital and Medical Insurance Plans Are Generally Available to Indians, but the Federal Government Pays Nearly All of the Premiums and for Services Not Included in the Plans

The British North American Act left to the provinces pre-eminent responsibility for passing legislation in the field of health, with minor exceptions in the field of international health. Provincial health insurance legislation indirectly excludes Indians from some benefits by excluding persons of the tax status to which most Indians belong.

Direct health services that are not covered in hospital and medical insurance plans generally are made available to Indians by provincial and conventional facilities, when such services are financed by the federal government.

These services include the following:

- . Mental care in provincial facilities
- . Tuberculosis care in provincial facilities
- . Dental care
- . Optical care
- . Prescription drugs

The benefits of provincial hospital and medical insurance plans are provided to Indians under a variety of arrangements between the provinces and the federal government.

In British Columbia, the provincial and federal governments share the cost of hospital and medical insurance for many Indians. In the case of Indians who are totally indigent, the federal government pays all the costs.

Hospital insurance is available to all residents of Alberta, including Indians. However, the province does not pay co-insurance for Indians on welfare as it does for other provincial citizens on public assistance. A medicare plan was recently adopted by the province, and arrangements to include Indians are under negotiation.

In Saskatchewan, the federal government pays the premiums and co-insurance for indigent Indians under the province's combined hospital and medical insurance plan. However, since Indians on reserves are not permitted to pay the premiums for this plan, the federal government, in actuality, has paid the premiums for all Indians, regardless of their financial status.

Hospital insurance is available for all Indians in Manitoba, and the federal government pays the premiums for indigent Indians living on reserves. Details for the inclusion of Indians under the newly enacted medical insurance plan have not been developed.

In Ontario, hospital insurance is provided for all residents, including Indians. The premiums for indigent Indians are paid by the federal government. Voluntary medical insurance is available to all who pay the full premium and the federal government generally has paid the premiums for indigent Indians. Ontario is planning to participate in the federal-provincial medicare program in the near future.

Indians in Quebec are provided coverage under the hospital insurance program, but the province does not share costs for Indians who receive welfare payments from the Indian Affairs Branch. Like Ontario, Quebec does not yet participate in the federal-provincial medicare program.

In the Maritime Provinces, hospital insurance is generally available to Indians. In most cases, the insurance is financed by the federal government.

(3) A Number of Provincial Governments Appear Willing To Assume Responsibility for the Provision of Health Services to Indians Provided Satisfactory Financial Arrangements Can Be Developed with the Federal Government

Many of the provincial deputy ministers of health express willingness to assume responsibility for providing or arranging for the provision of health services to Indians if the federal government will meet financial requirements. The treaty rights of Indians and the extent of the federal government's responsibility to provide health services to Indians will need to be clarified as consideration is given to the formal transfer of responsibilities for health services to the provinces. There is already considerable sharing of responsibility for Indian health services between the federal and provincial governments, but this is generally on an informal basis.

The British Columbia Health Department provides Indians on many of the southern reserves with basic nursing services, including immunization, maternal and child care, and health education. In exchange, the Medical Services Branch pays a per capita contribution or agrees to provide equivalent services to non-Indians in northern areas of the province.

Through similar informal agreements in Alberta, Saskatchewan, and Manitoba, the provincial governments provide public health services and treatment to Indians and non-Indians in certain northern areas, while the federal government provides these services to Indians and non-Indians in other northern areas. In southern areas, both the provincial and federal governments provide public health services to Indians.

The federal government provides treatment and public health services to most of the Indians and non-Indians in the relatively isolated portions of northern Ontario. In the southern sections, public health nursing on Indian reserves is provided by the provincial and federal governments. Treatment services generally are received through conventional facilities.

In some provinces, a number of bands in organized areas have applied for participation in local county health units. The Medical Services Branch has assisted them with the per capita payments.

In the Middle North, informal sharing of responsibilities for geographic areas has created two systems of health care for Indians - one provincial and conventional, the other federal.

The Manitoba Health Department has established a Northern Health Services and Northern Health Unit to render services in various locations in the north while the federal government provides such services in other locations. Health departments and conventional resources in Alberta, Saskatchewan, and Ontario also provide services to some northern areas while the federal government provides services in other northern areas.

The federal health system for Indians is more prevalent in the Middle North than in the southern areas of the provinces. While the area's geographic isolation and economic differences make it difficult to assess health care in the Middle North by the same standards of quality that are applied in the south, the comparison often is made and there is potential for accusation of a double standard of health care - one for Indians, one for other Canadians.

The informal sharing of health care services by provincial and federal authorities has created gaps in the services provided to some areas, particularly in filling personnel vacancies, since filling such vacancies assumes a lower priority than when responsibility is formal.

(4) Approximately 15 Indian Bands Share Some Portion of the Cost of Health Services with the Federal Government

While many Indians and Indian leaders seem to feel that medical care should be provided to them in perpetuity, irrespective of their ability to pay, some Indian bands have broken away from this concept. Approximately 15 bands pay all or a portion of their health services costs. The amount of cost assumed by the bands ranges from 15% to 100%.

2. THE INDIAN HEALTH PROGRAMS OF THE MEDICAL SERVICES BRANCH ARE BROAD IN SCOPE BUT NEED INCREASED EMPHASIS IN SEVERAL IMPORTANT AREAS

The Indian health services programs are intended to provide many kinds of services to a widespread population. However, health programs observed in the Middle North generally have emphasized treatment rather than prevention of disease. To the extent that this tendency exists in the programs in other sections of the country, and to the extent that programs operate under conditions similar to those in the Middle North, the conclusions presented here are applicable to Indian health services in the country as a whole.

(1) Indian Health Services Are Comprised of Three Basic Programs

Programs for the control and treatment of disease among Indians receive primary emphasis. Efforts and resources of

the program are concentrated particularly upon inpatient, outpatient, and emergency treatment services. Programs for disease control have focused upon tuberculosis, venereal disease, and chronic disease.

Specialist programs are another important facet of Indian health services. Major emphasis in this area is placed on eye care, especially for children, and upon dental service. In some regions, mental health and nutritional programs are provided.

The promotion and protection of health, the third basic program of Indian health services, includes personal hygiene, maternal and infant care, home visitation, school health, immunization, and sanitation.

(2) Certain Important Health Programs Merit Increased Emphasis

The Indian health services observed are primarily treatment-oriented, providing care at crises rather than on a continuous and preventive basis. The division of responsibility between separate federal departments and the lack of comprehensiveness in agreements with

other authorities complicate efforts to mobilize thoroughgoing programs in many of the following areas:

- . Effective integration of health education with the school curriculum frequently is lacking.
- . As a result of legal and political entanglements, there is no formal family planning program.
- . Safety and accident prevention programs receive little emphasis, even though accidents are a leading cause of death among Indians.
- . Follow-up care was virtually nonexistent in the communities visited. Indians frequently do not seek follow-up care because they consider themselves cured after marginal relief of pain or symptoms. Their attitude and the lack of sufficient time on the part of field personnel appear to account for the present lack of follow-up care.
- . Environmental health programs receive little emphasis, and efforts by Medical Services Branch personnel to improve conditions in Indian communities are frustrated because such programs are not the responsibility of the Department of National Health and Welfare.

(3) Programs in Public Health and Health Education Are Especially in Need of Increased Emphasis

The strong emphasis on treatment in the health programs observed has diverted time and attention from public health education. The need for such programs is indicated by the Indians' general lack of awareness of the need for preventive

health services and personal hygiene. Indians tend to utilize health services either when they are acutely ill or for minor conditions, because they do not understand how to utilize health services most effectively.

Present public health teaching and promotional materials generally are not adapted to the Indian language and culture and are poorly received by Indians. Public health materials had not been distributed to many of the field units visited. Little training in home economics, home management, and nutrition is available in the Indian communities observed.

(4) Indians Generally Are Not Involved in the Planning and Operation of Indian Health Programs

Because the Indians seldom are involved in planning the health programs for their communities, they frequently regard the programs with apathy and feel them to be foreign and imposed. Their lack of involvement often means that they do not understand the health services being provided. The paternalistic approach often taken in the implementation of the health programs has tended to complicate the feelings of apathy, resentment, and inferiority among the native people. Even community aides and community health workers, often Indian themselves, may be regarded as pawns of what the community feels to be foreign programs.

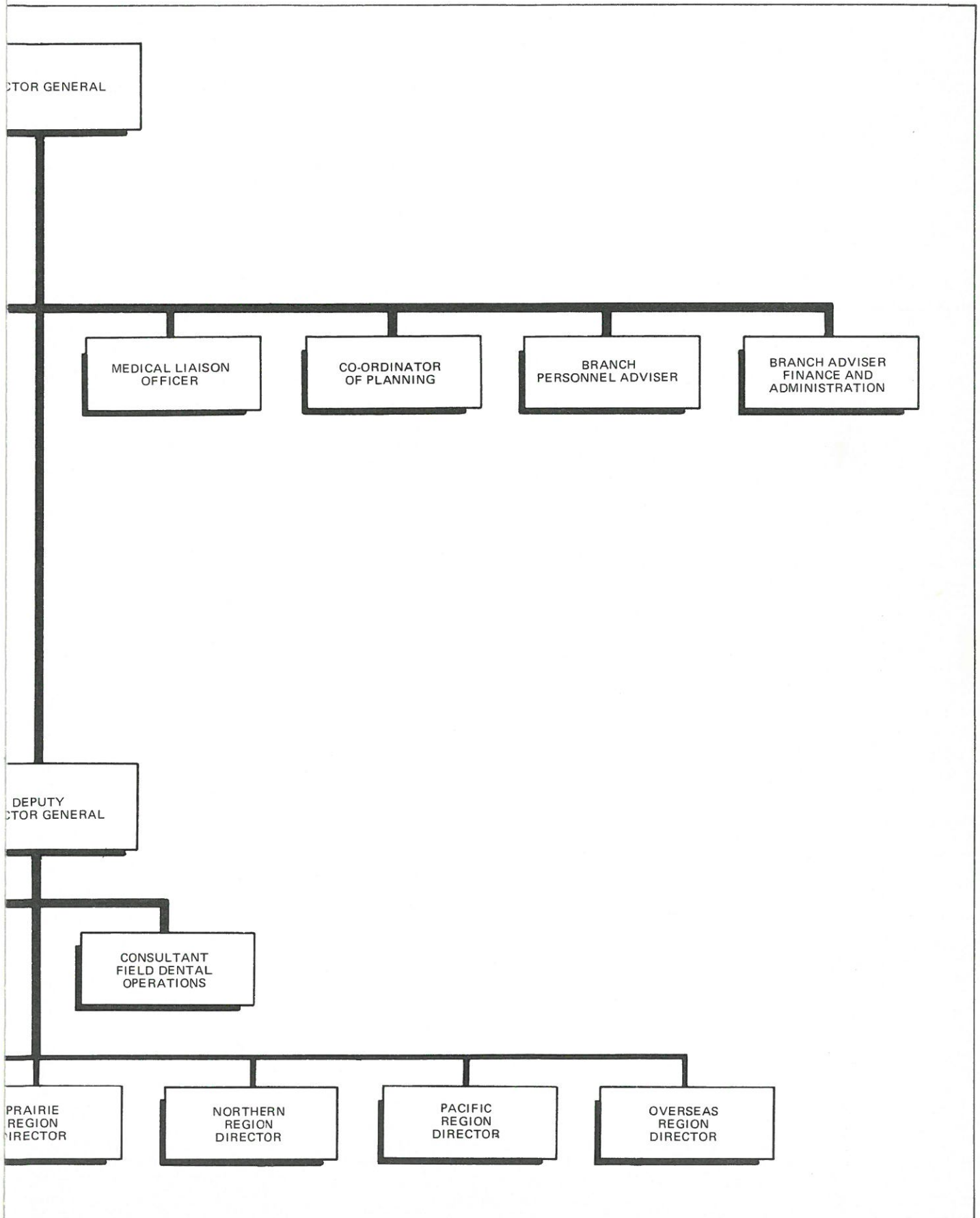
In some communities, health advisory committees composed of native people have been formed to increase the opportunity for Indian involvement in the operation and evaluation of their health programs. However, at present, these committees have had limited effectiveness, primarily because the Indians have not understood their purpose or value. Occasionally, their efforts have been discouraged by their feeling that their ideas would not be heeded.

The Indian Health Advisory Council, presently being formed by the Department of National Health and Welfare, is a step toward greater Indian involvement. However, it should be recognized that any advisory body faces problems stemming from its lack of authority to implement decisions.

3. THE PRESENT ORGANIZATION OF THE MEDICAL SERVICES
BRANCH PROVIDES INSUFFICIENT FOCUS AND EXECUTIVE
DIRECTION FOR INDIAN HEALTH SERVICES

Exhibit XXXIII, following this page, illustrates the present organization structure of the Medical Services Branch. The operations of the branch are centered in a head office and seven regional offices. Each region is further broken down into zones and areas.

EXHIBIT XXXIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**HEAD OFFICE ORGANIZATION OF THE
MEDICAL SERVICES BRANCH**
(Showing Regions)



(1) The Lack of Clear Delegation of Authority and Responsibility at the Top Management Level, Together with the Other Programs Administered by the Branch, Results in the Direction of Insufficient Attention to Indian Health Services

In addition to Indian health services, the branch administers seven other health programs which, except for the northern health services program and the sick mariners program, are not similar to the Indian health services program. Health services to Indians account for approximately 60% of the branch budget, with the other seven programs accounting collectively for the remaining 40%.

Basic responsibility and authority for all branch programs are concentrated in two line officers in the Medical Services Branch - the Director General and the Deputy Director General. The broad span of management responsibility vested in these two officers limits the time they have available for the direction of Indian health services.

Because of his comprehensive responsibilities, the Director General has several staff advisers to assist him in performing his duties. Job descriptions do not exist for these advisers, and there is considerable confusion regarding their responsibilities. A rather complex and unclear informal organization has developed. It appears that authority for certain operations has been delegated to the advisers, but this authority remains unclear. With respect to Indian health services, the division of authority among the

adviser for Indian health services (Senior Medical Adviser, Health and Treatment), the Director General and the Deputy Director General is particularly unclear.

Because the responsibility and authority of each member of branch top management for Indian health is unclear, and because each member is involved in several program areas, less than full effort has apparently been devoted to resolving the more difficult problems involved in providing health services to Indians.

(2) More Effective Implementation of the Management Functions Required for the Operation of a Decentralized Organization Is Needed in the Medical Services Branch

The size of the geographical area the Medical Services Branch is required to serve and the differences in conditions in each region, make necessary a decentralized operation so that decisions can be made in each area as problems arise. Not only does federal government policy generally encourage decentralization, but such action has been recommended in previous studies prepared for the branch. Personnel at head office and regional levels appear to be in general agreement with the principle of decentralization.

The head office in a decentralized organization has primary responsibility for determining organizational objectives and

policies and for providing the overall planning, co-ordination, control, and leadership required to achieve the objectives. It is the primary function of regional offices in a decentralized organization to carry out the program and to provide the direct management and supervision of programs to ensure that objectives and goals are met.

Although there is no job description for the position of regional director, it appears that they generally have the authority required to perform the primary functions of a regional office in a decentralized organization. The head office of the Medical Services Branch, however, has yet to implement fully the primary management functions required of it in a decentralized organization. In particular, it has not clarified the policies and objectives that serve to guide the regional offices. The result has been a lack of direction for the Indian health services program and serious problems in implementing health programs at the regional level.

Regional offices have little basis for determining their responsibility and directing their activities, and policies for the medical treatment of Indians remain unclear. Inconsistencies include the following:

Specific policy states that the Indian health services program will provide health care only to indigent registered Indians, while

in practice all people - white, metis, and Indian - are given care in some communities.

- . Most treaty Indians, whether they are living on or off reserves, are indigent or not, are provided health services and have their health insurance premiums paid by the Medical Services Branch.
- . In certain areas, the policy is to provide only public health services, although treatment services actually are provided.

Since the regions lack general direction for developing operating objectives, objectives of subprograms occasionally are inconsistent from region to region. As an example, the Pacific Region has as a goal the monthly visit by a physician to each large community, while in the Quebec Region, the goal is for a physician to visit such a community once a year.

The present management information system is not adequate for planning, evaluation, and control. The accounting system, which primarily records the historical incurrence of costs, is not conducive to financial planning or management analysis. There is no provision of quantitative measures of the health status and services in Indian communities, and statistics are reported throughout the organization in various forms.

Regional management and evaluation of programs have been difficult in the absence of an effective management information system and clear objectives against which actual performance can be measured. Considerable, and in some cases excessive, autonomy has evolved in the regional offices as a result of the lack of frame of reference for determining responsibility and directing activity and the inability to evaluate performance thoroughly.

4. THE SHORTAGE OF HIGHLY SKILLED HEALTH PERSONNEL IN THE MEDICAL SERVICES BRANCH IS SERIOUSLY LIMITING THE EFFECTIVENESS OF THE INDIAN HEALTH SERVICES. MEDICAL SCHOOL AND PROFESSIONAL ASSOCIATION AGREEMENTS REPRESENT A POSITIVE APPROACH TO RESOLVING PERSONNEL PROBLEMS

The difficulty encountered by the Medical Services Branch in recruiting and retaining numbers of personnel adequate to provide full service to Indian communities is particularly acute in the Middle North. Agreements with medical schools and professional associations hold potential for helping alleviate the personnel shortage.

- (1) There Is a Serious Shortage of Health Manpower Providing Health Services to Indians

While the need for increased numbers of health personnel exists in all phases of the Indian health services program, shortages are particularly acute in professional classifications.

(1.1) Only 58 Federal Physicians Provide Service to Indians

As Exhibit XXXIV, following this page, indicates, 58 federal physicians, excluding those in the Northern Region, provide service to Indians. Only 37 of the 58 provide full-time care to Indians. Most of their time is spent in hospitals or clinics rather than in visits to surrounding communities. No federal physicians are based in the Quebec Region.

In the Middle North, there are only five federal physicians - two at the Norway House and three at Moose Factory hospitals. Other federal physicians do, however, make occasional field visits to the Middle North. Approximately 52 civilian physicians are located in the Middle North, as follows:

.	Ontario	-	0
.	Manitoba	-	33
.	Saskatchewan	-	6
.	Alberta	-	13

It is estimated that approximately 33 of these may spend as much as half their time treating Indians.

EXHIBIT XXXIV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**DISTRIBUTION OF FEDERAL PHYSICIANS
PROVIDING MEDICAL CARE TO REGISTERED INDIANS,
BY LOCATION AND TYPE OF SERVICE**
March 1969

<u>Region</u>	<u>Total Physicians</u>	<u>General Medical Officers</u>	<u>Public Health Field Administration</u>	<u>Specialists</u>	<u>Headquarters Administration</u>
Headquarters	1	-	-	-	1
Atlantic Region	3	2	-	-	1
Quebec Region	1	-	-	-	1
Ontario Region	12	7	3	1	1
Prairie Region	30	14	8	7	1
Pacific Region	<u>11</u>	<u>4</u>	<u>4</u>	<u>2</u>	<u>1</u>
Total	<u>58</u>	<u>27</u>	<u>15</u>	<u>10</u>	<u>6</u>

Source: Physicians Giving Direct Services to Indians, Medical Services Branch, March 31, 1969

(1. 2) Only 18 of the 27 Positions for Federal Dentists in the Medical Services Branch Are Filled

The locations of the 18 dentists by region, excluding the Northern Region, are indicated in the table below.

Headquarters	1
Atlantic Region	1
Quebec Region	2
Ontario Region	3
Prairie Region	7
Pacific Region	<u>4</u>
Total	<u>18</u>

Fifteen of these spend approximately full time providing dental services to Indians; the other three hold administrative positions. Five of the dentists providing care to Indians include the Middle North in their areas of responsibility.

(1. 3) There Are 489 Federal Registered Nurses Providing Health Care to Indians

As indicated in Exhibit XXXV, following this page, approximately 65% of the federal nurses are based in hospitals or hold supervisory positions. Approximately 50% of the nurses in the field are located in the Prairie Region.

In the Middle North, there are 93 nurse positions, 54 of which are in field stations providing treatment and public health services for Indians. Of the 54 positions,

EXHIBIT XXXV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**DISTRIBUTION OF FEDERAL NURSES
PROVIDING CARE FOR REGISTERED INDIANS,
BY LOCATION AND TYPE OF SERVICE**
April 1969

<u>Region</u>	<u>Field</u>	<u>Hospital</u>	<u>Supervisors</u>	<u>Total</u>
Pacific Region	22	23	5	50
Prairie Region:	91	203	23	317
Manitoba Zone	40	16	5	61
Saskatchewan Zone	26	25	8	59
Alberta Zone	25	162	10	197
Ontario Region	31	37	8	76
Quebec Region	33	0	4	37
Atlantic Region	6	0	0	6
Headquarters	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>
Total	<u>183</u>	<u>263</u>	<u>43</u>	<u>489</u>

Source: Nurse Population by Exact Distribution in Each Province,
Medical Services Branch, April 1969

42 were filled as of April 1, 1969. Many of the nurses in the Middle North are foreign graduates with midwifery training.

(1. 4) Approximately 52 Community Health Workers Are Employed To Provide Assistance with Public Health Education for Indians

As indicated in Exhibit XXXVI, following this page, approximately 75% of the community health workers are employed on reserves in the Prairie Provinces. The community health worker program, begun in 1961, is an effort to involve Indians in teaching their own people how to improve their environmental conditions. As employees of the Medical Services Branch, community health workers function under the limited supervision of a field nurse. Workers receive five months of instruction but are not trained to dispense drugs.

(1. 5) At Present, 99 Lay Dispensers Provide Services on Indian Reserves. Approximately 25 Indians Are Employed in the Community Aide Program Designed To Replace the Lay Dispenser Program

Approximately 80% of the lay dispensers are non-Indians living on reserves. They have received virtually no training for their work and rely upon a manual for guidance. Some lay dispensers observed in the Middle North were without this manual.

EXHIBIT XXXVI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**DISTRIBUTION OF COMMUNITY HEALTH WORKERS,
COMMUNITY AIDES, AND LAY DISPENSERS
PROVIDING CARE FOR REGISTERED INDIANS,
BY LOCATION
1969**

<u>Regions</u>	<u>Community Health Workers</u>	<u>Community Aides</u>	<u>Lay Dispensers</u>
Headquarters	0	0	0
Atlantic Region	0	0	0
Quebec Region	0	0	2
Ontario Region	5	9*	33
Prairie Region	38	18*	36
Pacific Region	<u>9</u>	<u>-</u>	<u>28</u>
Total	<u>52</u>	<u>27*</u>	<u>99</u>

* Trainees of the first community aide course

Source: Rosters of personnel, Medical Services Branch

The program is being phased out and lay dispensers are being replaced by community aides who are trained in first aid practices.

Community aides, typically, are native persons in the part-time employ of the Medical Services Branch who operate independently under the guidance of doctors and nurses. Aides receive one month of training, after which they are placed in isolated communities which have no other health treatment personnel in residence. They have responsibility for providing first aid and minor drugs to members of the community. For problems that require more than minor home nursing treatment, the aide seeks advice or requests evacuation by means of voice communication with a doctor or nurse.

The first 27 trained aides are now in the field. As indicated in Exhibit XXXVI, approximately two-thirds of the community aides are from reserves in the Prairie Region.

(2) Serious Shortages of Health Manpower Restrict the Ability of the Medical Services Branch To Deliver Adequate Health Care to Indians

An inadequate number of health personnel at all levels must provide treatment to a large number of Indian patients,

with the result that the quality of health services rendered to

Indians is lowered in the following ways:

- . Short-term treatment and emergency care rather than comprehensive medical services are provided in areas where there are inadequate numbers of health personnel.
- . The severe shortage of dentists results in a program of extraction, with little preventive dentistry being done.
- . The long distances between communities and travel time required in many areas prohibits efficient use of time and compounds the problem of personnel shortages.
- . The frequency of visits to isolated communities by physicians, dentists, and nurses is reduced because each is responsible for such a large area.
- . Lack of contracted ophthalmologists and optometrists leaves Indian eye care needs largely unmet in all communities of the Middle North.
- . Little public health education is conducted by nurses because of the inadequate numbers of personnel and, in some cases, because of their lack of interest in public health.
- . Continuity of health care is lacking because of the shortage, high turnover, and transfer of nurses. Many of the nurses interviewed, while of high calibre, had accepted their positions for adventure or to obtain a public health course bursary. The average tenure for a field nurse is approximately 18 months.

- . Long delays in filling nurse vacancies often create gaps in the services provided to Indian communities.
 - . Unreasonable delays in reimbursement and low fee schedules in the past discouraged many civilian physicians and dentists from rendering care to Indians.
- (3) Physician and Dentist Visits to Many Reserves Are Infrequent and Often Unannounced, Due Primarily to the Shortage of Personnel

Visits by health professionals typically are not scheduled on a regular basis and standards for frequency of visits have not been uniformly established. In the Middle North, where communities often are not informed in advance of a visit by a dentist or physician, plans cannot be made for patients to see the doctor. Lengthy plane flights and the lack of facilities for staying overnight in many parts of the Middle North often limit the visits of professional personnel to three or four hours.

- (4) The Compensation and Fringe Benefits for Indian Health Services Employees Are Not Competitive and Do Not Attract the Needed High Calibre Professional Personnel

Compensation to employees of the Medical Services Branch is particularly inadequate considering the conditions under which many personnel must work.

(4. 1) The Level of Compensation of Professional Personnel
Is Not Competitive

In 1969, the salaries of recently licensed physicians employed by the federal government range from \$9,178 to \$13,461. In 1967, as a comparison, the average Canadian physician under age 35 received net professional earnings of \$18,559. The maximum rate of pay for a medical officer of the Medical Services Branch is \$23,570, while the 1967 average professional earnings for physicians between the ages of 35 and 65 amounted to \$26,588.

More recent estimates for physicians' professional earnings are higher than the 1967 average used in this comparison, but actual figures are not yet available. The current difference between federal salaries and civilian salaries is thus even higher than that indicated here. A number of the salaries quoted for mining company physicians in the Middle North were twice the amount of the maximum pay for medical officers with the Medical Services Branch.

The 1969 salaries of federally employed dentists range from \$11,578 to \$15,667. In comparison, average net professional earnings of dentists in Canada were \$18,686 in 1965.

Again, current discrepancies between federal and civilian salaries would be even greater if more recent data for civilian earnings were available.

Starting salaries for federal nurses are below every provincial health department rate available except that of Alberta and were below starting salaries recommended by the provincial nursing associations, as indicated in Exhibit XXXVII, following this page. Nurses employed by the Medical Services Branch assume responsibilities beyond ordinary nursing duties, particularly in the Middle North. Pay scales that are below those for otherwise comparable positions do little to make the position of added responsibility attractive. While an environmental allowance is given in some of these areas, the approximate average of \$800 a year for service in the Middle North areas does not make the salaries properly competitive.

(4.2) Fringe Benefits for Professional Personnel in Isolated Areas Are Not Adequate

Statutory holidays seldom are taken by Indian health service personnel in isolated areas. Nurses in isolated areas who are on call 24 hours a day, 7 days a week,

EXHIBIT XXXVII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**COMPARISON OF STARTING SALARIES
OF FEDERAL NURSES WITH PROVINCIAL SALARY RATES
1969**

<u>Provinces</u>	<u>Current Starting Salary Medical Services Branch</u>	<u>Provincial Health Department Starting Salary 1969</u>	<u>Recommended Starting Salary Provincial Nurses Association 1969</u>
Nova Scotia	\$4,800.00	\$5,340	\$
Quebec	5,400.00	*	6,600.00
Ontario	5,400.00	*	6,600.00
Manitoba	4,950.00	5,088**	6,000.00**
Saskatchewan	4,800.00	5,304	5,280.00
Alberta	4,950.00	4,740**	5,280.00
British Columbia	5,400.00	5,580*	7,200.00**

* Not available

** 1968 rates

Sources: Federal annual basic salaries for staff nurses, January 1, 1968
Provincial and national nursing associations employment standards information
supplied by Medical Services Branch

receive few additional benefits. Professional personnel providing health services to Indians receive little encouragement in terms of recognition and elevated status.

(4. 3) The Success of Efforts To Recruit Personnel Has Been Limited for a Number of Reasons

The general shortage of health personnel throughout the country has affected the Indian health services program. In the Middle North particularly, the isolation and poor economic conditions of some areas make recruiting personnel for any task difficult. Qualified health personnel who find themselves in demand elsewhere in the country generally are not attracted to federal service in more isolated areas by present benefits and incentives. As a result, the branch often has employed less than high quality personnel to fill vacancies.

Recruitment efforts have not included extensive use of professional journals. It was reported that during the past several months no advertisements appeared in such journals. Personal recruitment visits to medical, dental, and nursing schools by branch personnel are not frequent enough to derive satisfactory results. Increased efforts to inform young professionals of the challenge of service with the Medical Services Branch in the Middle North are needed.

The present economic situation and cultural isolation in the Middle North offer little inducement to professional personnel, but potential economic developments may increase the attractiveness of positions in the area. Exhibit XXXVIII, following this page, indicates the possible areas of economic development in the Middle North.

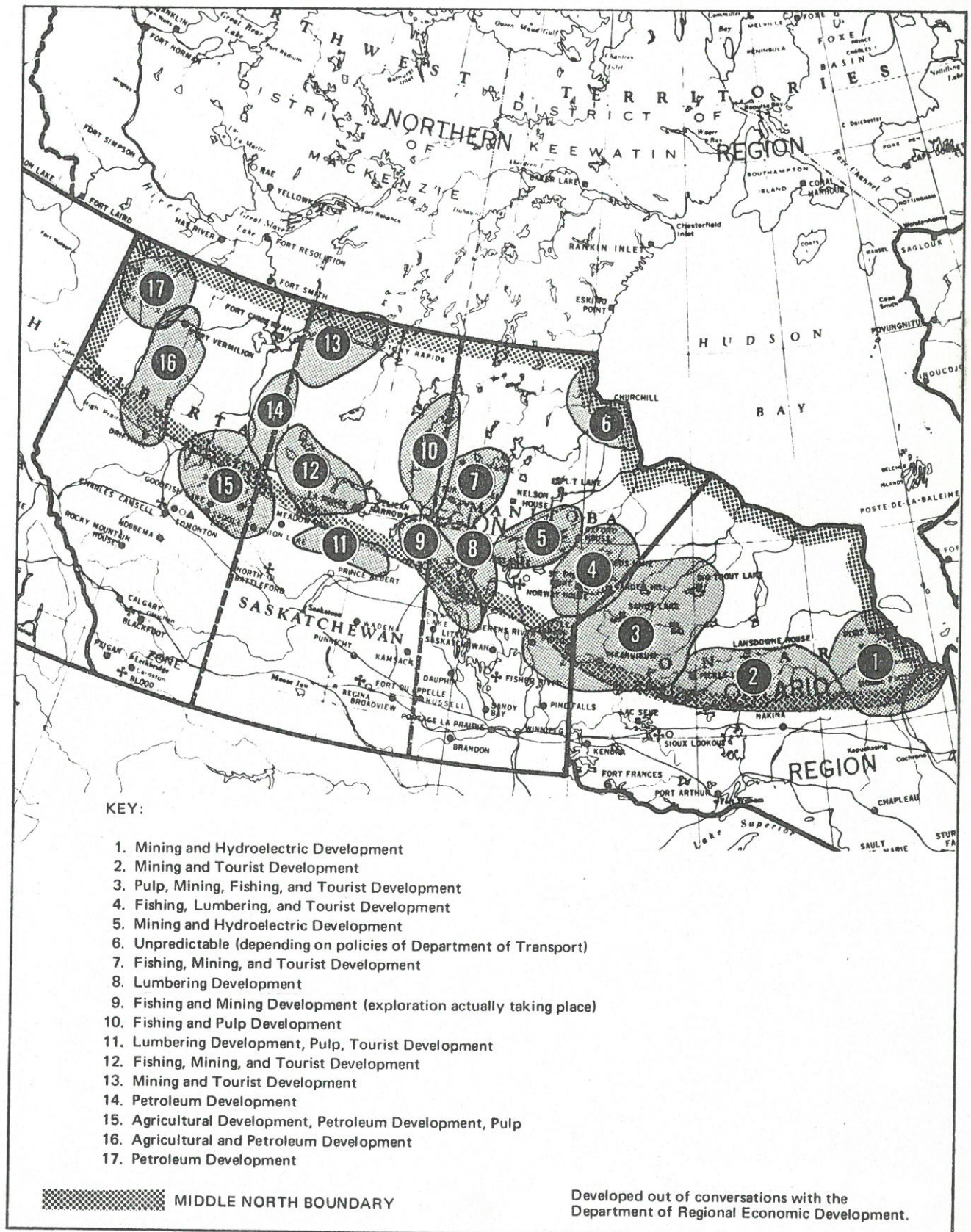
(5) Increased Orientation of Branch Personnel to the Culture and Problems of Indians Is Needed

Few personnel are familiar enough with the culture and language of the Indians at the time of their placement, and those who cannot relate to the native people lose much of their effectiveness. Often new personnel do not know what conditions and problems they can expect to encounter when they arrive in Indian communities, and many are not certain of their relationship to native health workers.

(6) Continuing Education of Field Personnel and Communications with Health Professionals Need Improvement, Particularly in the Middle North

Shortages of time and professional personnel have limited the continuing education of field nurses, especially in the Middle North. Physicians have found little time to spend training them in methods of treatment. Most field personnel are unable

EXHIBIT XXXVIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**AREAS OF POSSIBLE
ECONOMIC DEVELOPMENT IN
THE MIDDLE NORTH**



to attend national conferences that would make them more professionally capable, and there are few branch conferences in which professional personnel can exchange ideas, methods, and problems.

Continuing professional communications between physicians and field nurses are difficult to maintain where physician's visits are short or infrequent, in cases where recommendations for continuing care are issued from a distant facility to which patients had been sent for treatment, and the like.

(7) The Valuable Native Health Worker Programs Have Encountered Some Difficulties

The community health worker program has been generally successful in transferring some responsibility to native people. Difficulties encountered by the Medical Services Branch in implementing the program have centered around the recruitment and training of enough qualified personnel. The branch has also had difficulty recruiting and training sufficient numbers of qualified community aides.

Because the community health worker has been given no real authority, he must be a strong individual, respected and recognized as a leader by his community, if he is to be

successful. The selection of native health workers consequently must be made with care and with the active participation of the Indian community. Once workers are selected, they should receive continued training and guidance from branch personnel.

(8) The Interest of Medical Schools and Professional Associations in Providing Health Services to Indians Indicates a Potential Resource for Alleviating Many of the Personnel Problems Faced by the Medical Services Branch

Medical schools and professional societies represent a source of highly qualified health manpower and could help ease the present shortage of personnel in the Indian health services program.

(8.1) About Half of Canada's Medical Schools Are or Will Be Providing Indian Health Services and Most Others Have Shown High Interest

Through exemplary joint effort of Queen's University Medical School and the Medical Services Branch, the medical school began providing medical services in the Moose Factory area in 1965. In addition, the medical school has been conducting school and child health clinics at Tyendenage Reserve near Deseronto, Ontario since 1963. At Moose Factory:

The medical school has agreed to provide a full-time paediatrician, with paediatric residents rotating each month.

- . Medical students will provide service on a two-week rotating basis throughout the year.
- . Field visits are conducted by the paediatricians to the surrounding communities.
- . Faculty members from other clinical departments have expressed interest in having their residents participate in the program.
- . The present cost of the program is approximately \$17,000 annually, but is expected to increase substantially.

Through an agreement with the University of Toronto Medical School, comprehensive medical resources will be made available to the Sioux Lookout Hospital and the zone.

- . Two full-time general practitioners, chosen by the university, will render medical services to patients at Sioux Lookout Hospital and periodically to patients in surrounding communities.
- . Senior assistant paediatric residents, each serving for a one-month period, will provide continuous coverage. Consultants in paediatrics will also visit one week a month.
- . Six internal medicine residents will spend one month each during alternate months. It is hoped this can be expanded to twelve-month coverage in the future.
- . Other plans are being developed within the following medical departments to assist in the program by providing consultants and residents on a periodic basis:
 - Ophthalmology
 - Otorhinolaryngology
 - Obstetrics and gynaecology
 - Surgery

- Anaesthesia
- Dentistry
- Clinical pathology
- Others

- . It is hoped that the university's department of nursing or hospital nursing schools will become interested in the project.
- . Consideration has been given to making the project an elective for medical students.
- . The estimated cost of the program is \$150,000 annually.

An agreement has been made with McGill University Medical School to provide medical care to Frobisher Bay and Baffin Island.

- . Each year, two full-time physicians chosen by McGill will provide services to the Frobisher Bay area.
- . Each month, a paediatric resident and internal medicine resident will provide service at Frobisher Bay Hospital.
- . Other medical consultants will visit the Frobisher Bay Hospital periodically.
- . A director of the McGill project will be located in Montreal.
- . A preceptorship program for medical students is under way.
- . Initial cost estimates for this program are \$250,000 annually.

The University of Western Ontario Medical School provides care to nearby Muncey Reserve and is interested in developing a combined program with Queen's University at Moose Factory.

- . Paediatric residents make regular visits and hold clinics at Muncey Reserve.
- . Extension of the service beyond paediatrics is being considered by the departments of internal medicine, dentistry, and nursing.
- . The departments of internal medicine and dentistry have expressed some interest in combining efforts with Queen's University Medical School at Moose Factory.

Family practice residents of McMaster University Medical School provide medical care for Indians at the Six Nations Reserve at Brantford. McMaster also is interested in providing services at Sioux Lookout or Ohsweken, Ontario.

Medical services for Indians will be provided by rotating residents from Calgary University on three Indian reserves near Calgary: Cardston, Gleichen, and Rocky Mountain House.

It is expected that the medical school at the University of Manitoba will agree to render medical services in the Keewatin and Churchill areas in the future.

In addition, numerous medical specialty services are provided for northern communities of Inuvik, Yellowknife, Hay River, and Whitehorse by the University of Alberta Medical School. The medical faculty is also interested in establishing a relationship with Charles Cammell Hospital.

The medical schools of Montreal, Sherbrooke, and Laval universities have expressed interest in providing medical care to Indians and Eskimos in the province of Quebec.

The University of British Columbia Medical School is interested in providing medical care on an experimental basis to various isolated communities in the province. At least one of these will be an Indian reserve.

Although no definitive agreement for physician coverage has been made with the medical schools at Dalhousie and Memorial universities, discussions are under way.

The University of Saskatchewan has recently expressed limited interest in establishing a program.

To date the University of Ottawa Medical School has shown little interest in providing service to Indian communities.

(8. 2) Medical School Agreements Which Involve Clear and Continuing Responsibility for Providing Indian Health Services Are Beneficial to the Indians, the Medical Schools, and the Medical Services Branch, Especially in Isolated Areas

The continued development of medical school involvement in providing health services will do much to ease shortages of professional manpower and to help alleviate other problems of service that stem directly and indirectly from current personnel shortages. The following are among the benefits that may result from such co-operation between medical schools and the Medical Services Branch.

- . With more numerous and better educated physicians in isolated areas, Indians will receive a higher quality of medical care.
- . With greater numbers of physicians, the frequency of physician visits to the Indians in the field will increase.
- . University specialists and consultants will provide a more comprehensive range of health services to Indians.
- . New ideas for the improvement of Indian health services are likely to result with the involvement of young physicians from the medical schools.
- . There is potential for valuable research, particularly in the methods of delivering health care in rural and remote areas.

- . The exposure to different diseases and the magnitude of health problems will provide the physicians and medical students in training with valuable experience.
- . When direct responsibility for providing health services to Indians is transferred to medical schools, the need for federal physicians will be decreased.
- . A potential benefit of the program may be the increased hiring into the Medical Services Branch of young physicians who have participated in the university programs.
- . Medical school agreements will facilitate the transfer of responsibility for Indian health programs to the provinces from the Medical Services Branch.
- . The university agreements will inform more young physicians of the health problems of Indians, which may cause them to have continuing interest in providing service on some basis.
- . More professional contact between physicians and field nurses is likely to result.

(8.3) The Provincial Medical Associations of Canada Have Indicated Various Degrees of Interest in Assisting with the Provision of Medical Care to Indians

The Canadian Medical Association has accepted informal responsibility for developing a plan to organize voluntary physician coverage for Indians in isolated areas. Provincial representatives of the association will meet to develop the plan in the near future.

It is important that programs established be as formal and definitive as possible and that they be co-ordinated with the university agreements, particularly in overlapping geographic areas. It is anticipated that the Canadian Medical Association plan will provide a source of continuous medical care to certain geographic areas on a rotational basis.

The Canadian Paediatrics Society has established a special committee to deal with the problem of Indian and Eskimo child health care. The committee was originated to inform, foster interest, and involve individual members, universities, and provincial societies in the problems of Indian and Eskimo child health.

Members of the committee have met with the Minister of National Health and Welfare and representatives of the Medical Services Branch to discuss Indian child health problems and possible solutions. The Manitoba Paediatric Society has scheduled visits by paediatricians to northern areas of the province on a voluntary basis.

The Canadian Ophthalmological Society recently established a committee on eye care for Indians and Eskimos, and a plan will be developed to provide eye care to Indians in isolated areas on a voluntary basis.

The committee is considering a system for providing regular rotational visits by physicians to Indian communities.

The Canadian Dental Association is not involved in dental programs for Indians, but numerous contracts with individual dentists are facilitated through the provincial dental associations. With the recent increases in the welfare payment schedules for dental procedures, provincial dental associations may be more receptive to arranging dental services.

There has been little organized involvement by the Canadian Nurses Association and Canadian Public Health Association regarding the health services for Indians.

(8.4) The Development of Indian Health Service Programs with the Professional Medical Associations Can Provide a Valuable Source of Needed Additional Manpower

Up to the present time, efforts to involve professional societies have been limited, although the interest of these groups is increasing. The programs of these societies will need to be organized and co-ordinated with the university agreements, to avoid confusion and overlap in the coverage of the various communities.

5. THE FIVE TYPES OF FEDERAL HEALTH FACILITIES
SERVING INDIANS ARE GENERALLY ADEQUATE TO
MEET REQUIREMENTS

The federal government maintains five types of facilities to provide health services to Indians where other sources cannot. When conventional or provincial facilities become able to meet the needs of the Indian population, it is the policy of the Medical Services Branch to close federal facilities.

(1) Indian Health Services Are Provided in Five Types of
Federal Facilities

Hospitals, clinics, nursing stations, health centres, and health stations provide health care to Indians.

(1.1) Eleven Federal Hospitals Currently Serve Indians

Exhibit XXXIX, following this page, indicates the location and size of the eleven Indian hospitals, excluding three in the Northern Region.

Hospitals typically serve as the central patient referral facility supporting various nursing stations and health centres in the area. Most of the hospitals provide inpatient and out-patient care for Indians with a basic range of medical services. When more specialized care is required, Indians are evacuated to medical centres and larger nonfederal hospitals.

EXHIBIT XXXIX
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
SIZE AND LOCATION OF MEDICAL SERVICES BRANCH
INDIAN HOSPITALS, EXCLUDING THOSE IN THE
NORTHERN REGION

<u>Region</u>	<u>Hospital</u>	<u>Beds</u>	<u>Bassinettes</u>
Atlantic	None	-	-
Quebec	None	-	-
Ontario	Moose Factory General Hospital Moose Factory, Ontario	150	8
	Sioux Lookout Indian Hospital Sioux Lookout, Ontario	70	5
Prairie	Blackfoot Indian Hospital Gleichen, Alberta	19	2
	Blood Indian Hospital Cardston, Alberta	37	8
	Charles Camsell Indian Hospital Edmonton, Alberta	385	10
	Fisher River Indian Hospital** Hodgson, Manitoba	15	2
	North Battleford Indian Hospital North Battleford, Saskatchewan	50	4
	Norway House Indian Hospital Norway House, Manitoba	38	8
	Qu'Appelle Hospital Fort Qu-Appelle, Saskatchewan	66	8
Pacific	Coqualeetza Indian Hospital* Sardis, British Columbia	150	-
	Miller Bay Indian Hospital Prince Rupert, British Columbia	90	2
Total		<u>1,070</u>	<u>57</u>

* To be closed by December 1969

** To be replaced by the new Percy Moor Hospital, construction of which may be completed in 1970. Financed by the federal government (2/3) and Province of Manitoba (1/3).

Sources: Chart of Medical Services Facilities by Region, Zone, Area and Province,
April 1, 1969

The Modern Hospital's "Survey of Hospitals," March 1968

Twelve federal general hospitals and a number of tuberculosis hospitals have been closed because there was no need for the branch to maintain facilities that duplicated services available at conventional or provincial facilities. Scheduled for closing at the end of 1969 is the Coqualeetza Indian Hospital at Sardis, British Columbia.

(1. 2) In Federal Clinics, Medical Officers Render Outpatient Services to Indians

Exhibit XL, following this page, shows the location of the 23 clinics, excluding those in the Northern Region. The majority of clinics are located at federal Indian hospitals, so that clinic patients needing inpatient care can easily be transferred to the hospital. Proximity also facilitates effective utilization of professional manpower. Clinics typically are staffed by a medical officer and two registered nurses.

(1. 3) The Nursing Station Is the Most Sophisticated Field Facility in Which Health Services Are Provided for Indians Living in Isolated Communities

Exhibit XLI, following Exhibit XL, shows the locations of the 31 present and planned nursing stations. Such stations typically are located in isolated areas of approximately 500

EXHIBIT XL
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
LOCATION OF MEDICAL SERVICES BRANCH CLINICS,
EXCLUDING THOSE IN THE NORTHERN REGION

<u>Region</u>	<u>Clinic Location</u>
Atlantic	Halifax, Nova Scotia St. John, New Brunswick Sydney, Nova Scotia
Quebec	Dorval, Quebec Montreal, Quebec Quebec City, Quebec
Ontario	Malton, Ontario Manitowaning, Ontario Moose Factory General Hospital, Ontario Ohsweken, Ontario Sioux Lookout Hospital, Ontario
Prairie	Charles Camshell Hospital, Alberta Edmonton, Alberta Fisher River, Manitoba North Battleford, Saskatchewan Norway House, Manitoba Winnipeg, Manitoba
Pacific	Miller Bay Hospital, British Columbia Nanaimo, British Columbia Prince George, British Columbia Coqualeetza Hospital, British Columbia Vancouver, British Columbia Victoria, British Columbia
Total	23 Clinics

Source: Chart of Medical Services Facilities by Region, Zone,
Area and Province, April 1, 1969

EXHIBIT XLI
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
LOCATION OF EXISTING AND PLANNED MEDICAL
SERVICES BRANCH NURSING STATIONS,
EXCLUDING THOSE IN THE NORTHERN REGION

<u>Region</u>	<u>Present Nursing Station Locations</u>	<u>Planned Nursing Station Locations</u>
Atlantic	None	
Quebec	Great Whale River, Quebec Paint Hills, Quebec Port Harrison, Quebec Povungnituk, Quebec Romaine, Quebec Rupert House, Quebec Sugluk, Quebec	
Ontario	Big Trout Lake, Ontario Lansdowne House, Ontario Pikangikum, Ontario Sandy Lake, Ontario	Fort Hope, Ontario* New Osnaburg, Ontario* Round Lake, Ontario*
Prairie	Cross Lake, Manitoba Fort Chipewyan, Alberta Fox Lake, Alberta Garden Hill, Manitoba God's Lake Narrows, Manitoba Hay Lake, Alberta Little Grand Rapids, Manitoba Lynn Lake, Manitoba Nelson House, Manitoba Oxford House, Manitoba Pelican Narrows, Saskatchewan Pukatawagan, Manitoba St. Theresa Point, Manitoba Split Lake, Manitoba	Brochet, Manitoba* Shamattawa, Manitoba** South Indian Lake, Manitoba*
Pacific	None	
Total	25	6

* To be operational by 1970

** Trailer units have not arrived, planned to be operational by 1970

Source: Chart of Medical Services Facilities by Region, Zone, Area,
and Province, April 1, 1969

or more population, although a number of large communities in the Middle North have no nursing station. These include:

- . 2 communities of over 650 population
- . 3 communities of between 450 and 650 population
- . 2 communities of between 340 and 450 population

One to three nurses usually staff a station, providing inpatient and outpatient care and public health training to Indians of the area. If a community health worker is located in the community, he is supervised by the nurse in charge of the nursing station.

There are two to six beds in each nursing station to care for short-term maternity or emergency admissions. Nurses with special training in midwifery can perform normal deliveries at many stations. Patients in serious condition are held at the station until they can be evacuated to a hospital by air.

(1. 4) Health Centres Are Used Primarily for Public Health Programs

There are 83 health centres throughout Canada, excluding the Northern Region, as shown in Exhibit XLII, following this page. Typically, these centres are located in areas where clinical treatment facilities, either conventional or federal, exist, and the centres serve primarily to house public health education activities. There are no emergency or maternity beds in health centres.

The major responsibility of the nurse at the centre is to upgrade the level of public health and personal hygiene by holding various types of clinics at the centre. Using the centre as a base, she also conducts school health and home visiting programs. She may be assisted in public health programs by a community health worker.

(1. 5) Health Stations Are Located in Small Communities That Cannot Support Full-Time Professional Staff

The locations of the 37 Medical Services Branch health stations, excluding those in the Northern Region, are shown in Exhibit XLIII, following Exhibit XLII. Stations usually are located in areas with populations of no more than 200 people.

EXHIBIT XLII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**LOCATION OF MEDICAL SERVICES BRANCH
HEALTH CENTRES, EXCLUDING THOSE IN
THE NORTHERN REGION**

<u>Region</u>	<u>Health Centre Locations</u>	<u>Region</u>	<u>Health Centre Locations</u>
Atlantic	Big Cove, New Brunswick Chatham, New Brunswick Eskasoni, Nova Scotia Kingsclear, New Brunswick Shubenacadie, Nova Scotia	Prairie (continued)	Calgary, Alberta Cardston, Alberta Daughin, Manitoba Driftpile, Alberta Edmonton, Alberta Fort Qu'Appelle, Saskatchewan Gleichen, Alberta Good Fish Lake, Alberta Hobbema, Alberta Kamsack, Saskatchewan La Ronge, Saskatchewan Little Saskatchewan, Manitoba Meadow Lake, Saskatchewan Onion Lake, Saskatchewan Peigan, Alberta Pine Falls, Manitoba Popular River, Manitoba Portage La Prairie, Manitoba Prince Albert, Saskatchewan Rocky Mountain House, Alberta Russell, Manitoba Saddle Lake, Alberta Sandy Bay, Manitoba Sioux Lookout, Ontario Stony Rapids, Saskatchewan The Pas, Manitoba
Quebec	Amos, Quebec Bersimis, Quebec Caughnawaga, Quebec Fort Chimo, Quebec* Fort George, Quebec Lorette, Quebec Maniwaki, Quebec Manowan, Quebec Mistassini, Quebec Obedjiwan, Quebec Pointe Bleue, Quebec Restigouche, Quebec Schefferville, Quebec Seven Islands, Quebec Temiskaming, Quebec	Pacific	Alert Bay, British Columbia Alexis Creek, British Columbia Bella Bella, British Columbia Duncan, British Columbia Hazelton, British Columbia Kamloops, British Columbia Lillooet, British Columbia Masset, British Columbia Merritt, British Columbia Mount Currie, British Columbia Port Simpson, British Columbia Salmon Arms, British Columbia Terrace, British Columbia Tofino, British Columbia Vanderhoof, British Columbia Williams Lake, British Columbia
Ontario	Albany, Ontario Chapleau, Ontario*** Chippewa Hill, Ontario Christian Island, Ontario Deseronto, Ontario Fort Francis, Ontario Kenora, Ontario Muncey, Ontario Nakima, Ontario Orillia, Ontario Parry Sound, Ontario Pickle Lake, Ontario** Port Arthur, Ontario St. Regis, Ontario Sault Ste. Marie, Ontario Sturgeon Falls, Ontario*** Walpole Island, Ontario		
Prairie	Berens River, Manitoba Bonnyville, Alberta Brandon, Manitoba Broadview, Saskatchewan	Total	83

* To be loaned to the Province of Quebec

** To be closed and replaced by New Osnaburg nursing station

*** Plan to close during fall 1969 and base public health services at Sudbury

Source: Chart of Medical Services Facilities by Region, Zone, Area and Province, April 1, 1969

EXHIBIT XLIII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
LOCATION OF MEDICAL SERVICES BRANCH
HEALTH STATIONS, EXCLUDING THOSE IN
THE NORTHERN REGION

<u>Region</u>	<u>Health Station</u>	<u>Region</u>	<u>Health Station</u>
Atlantic	None	Prairie (Continued)	Pelican Lake, Saskatchewan Poundmaker, Saskatchewan Red Earth, Saskatchewan Sandy Lake, Saskatchewan Stanley Mission, Saskatchewan Stony, Alberta Sturgeon, Saskatchewan Sweetgrass, Saskatchewan Waterhen, Saskatchewan
Quebec	Eastmain, Quebec George River, Quebec* Ivugivik, Quebec Koartak, Quebec* Lac Simon, Quebec Mingan, Quebec Natashquan, Quebec Payne Bay, Quebec* Rapid Lake, Quebec Wakeham Bay, Quebec*	Pacific	Aiyansh, British Columbia Greenville, British Columbia Klemtu, British Columbia Kincolith, British Columbia
Ontario	Deer Lake, Ontario** Gull Bay, Ontario Kasotchewan, Ontario*** Lac Seul, Ontario Webequie, Ontario** Winisk, Ontario	Total	37
Prairie	Big River, Saskatchewan Bloodvein, Manitoba Clear Lake, Saskatchewan Jackhead, Manitoba La Loche, Saskatchewan Ministikan, Saskatchewan One Arrow, Saskatchewan Patuanak, Saskatchewan		

* To be lent to the Province of Quebec

** To be completed by April 1, 1970

*** Will be ready for use in 1969 as a satellite of Albany Health Clinic

Source: Chart of Medical Services Facilities by Region, Zone, Area and Province,
April 1, 1969

Medical supplies and drugs are kept in the health stations for use by the community aide and by the visiting nurse or physician, who makes periodic visits to render outpatient and emergency treatment to the community. Complicated or emergency cases are referred to the nearest hospital by the medical professional or the community aide. The health station also serves, like health centres, as a base for public health programs in the community.

(1.6) Community Aides or Lay Dispensers Render Health Services in Communities Which Do Not Have Full-Time Health Professionals

In isolated areas which have no full-time health professional, Indians are given advice and minor treatment by a community aide or lay dispenser who resides in the community. Except in cases requiring only minor treatment, the aide seeks advice from the doctor or nurse. Generally, the aides are employed in small communities of approximately 200 or fewer people, but they occasionally are located in significantly larger communities. Community aides maintain a stock of drugs and supplies for use by the doctor or nurse visiting the community.

At present, there are approximately 25 community aides and 99 lay dispensers, although these proportions will change as lay dispensers are replaced by the Indian, more highly trained community aides.

(2) Indian Health Facilities Appear To Be Adequate in Most Communities Visited

Observations made in site visits to the Middle North and to a few communities on southern reserves indicate that health facilities usually are of the size and type appropriate to the requirements of the community. Patients requiring care beyond the means of the local facility usually can be readily transferred to more sophisticated facilities, except in isolated areas, where evacuation is often difficult.

Equipment, except for the supply of stretchers, appeared to be adequate in most health facilities and medical supplies and drugs usually can meet the specific needs of the community.

(3) Indian Health Facilities Often Provide Services Similar to Those of Conventional Health Facilities

The following federal Indian hospitals are located in areas that also have conventional hospitals.

- . Moose Factory General Hospital (conventional facility recently destroyed by fire)
- . Blackfoot Indian Hospital
- . Coqualeetza Indian Hospital (to be closed)
- . Sioux Lookout Indian Hospital
- . North Battleford Indian Hospital

A number of federal health clinics for Indians are located in cities where conventional health personnel and facilities are available. Examples include:

- | | |
|---------------|--------------------|
| . Edmonton | . Victoria |
| . Halifax | . Winnipeg |
| . Montreal | . Sioux Lookout |
| . Quebec City | . North Battleford |
| . Vancouver | . Moose Factory |

A number of federal health centres continue to serve Indians when provincial public health services are generally available in southern areas of Alberta, British Columbia, Manitoba, Ontario, and Quebec.

(4) Facilities for Boarding Patients About To Enter or Return from Hospitals Are Inadequate in Some Locations

Hotels and private homes serve as interim boarding facilities in most locations, but some of these do not adhere to provincial standards for boarding facilities.

In instances where patients are boarded in Medical Services Branch facilities such as at Sioux Lookout Hospital, conditions are more directly under the supervision and control of branch personnel and are generally superior to boarding services in contracted homes or hotels.

(5) Convalescent and Custodial Facilities for Less than Acute Care Generally Are Not Available to Indians

In the Middle North, there is a general shortage of facilities for convalescent and custodial care. Most Indians requiring such care are admitted to a hospital or remain in their homes, where environmental conditions often are poor.

Indians generally prefer to take care of the elderly in their own homes, despite the burdens and inadequate environment. It is believed, however, that if it were found economically feasible to create custodial facilities within the community,

they would be accepted by the native people, since admission to a community-based facility would not require severance of all family ties.

It would not be practical to locate facilities for convalescent nursing care in Indian communities in the Middle North. The general shortage of facilities of this nature affects the entire population of the Middle North and is a problem that will require study by the appropriate authorities.

6. THE COMMUNICATION SYSTEM FOR INDIAN HEALTH SERVICES APPEARS TO BE ADEQUATE EXCEPT IN REMOTE AREAS, WHERE IT IS OFTEN UNRELIABLE

Methods of communication between administrators and field personnel and between various health service facilities are, for the most part, adequate to the needs of the branch. Problems are encountered in remote areas, particularly in the Middle North, where communities and health personnel may altogether lose contact with supporting health facilities and professionals.

(1) Communication by Telephone Is the Method Most Used

Telephone and Telex communications are used most frequently at the head office and at regional and zone levels of the branch. Most of the Indian health facilities in the

southern sections of the provinces also use telephones and few problems are encountered in operating these facilities. The more developed communities of the Middle North are served by regular provincial and Bell Telephone systems. In these areas, the quality of communications service often is comparable to that in southern communities.

(2) Health Personnel in Isolated Areas Generally Rely on Various Sources of Radio Communication

In remote areas which are visited infrequently by physicians, field nurses and community aides are given responsibility for the primary treatment and diagnosis of disease. It is essential that they be able to communicate with a physician 24 hours a day, 7 days a week. Communities in these isolated areas, particularly in the Middle North, often depend on radios or radio-telephones for communication with outside groups. While many of the Indian health facilities in these communities have their own radio equipment, some do not and must rely on the equipment used by the entire community. The supplementary sources of equipment include:

- . Free traders
- . Hudson's Bay stores
- . Provincial conservation agencies
- . Religious missionaries
- . Royal Canadian Mounted Police
- . Federal Department of Transport

These sources are also used to supplement equipment owned by branch facilities.

(3) Communications in Numerous Isolated Communities Are Inadequate for a Number of Reasons

Health personnel in geographically isolated communities rely heavily upon communication equipment for support from other personnel and facilities. Lapses and breakdowns in communication service render these personnel even more isolated and leave them without professional advice, recourse to evacuation, and the like.

Telephone systems, where they exist, are subject to breakdown resulting from such occurrences as battery failure and fallen lines, and repairs are not as quickly made as in more developed locations. Ionosphere conditions in the Middle North frequently interrupt radio communications and radio equipment in need of repair occasionally causes long periods of communication blackout.

Twenty-four-hour-a-day service to points outside the community is not always available in either telephone or radio systems, thus limiting the period when assistance for emergencies can be obtained. Radio transmissions are often

relayed through government agency installations operating on a 9 to 5 schedule, with no service on weekends.

Because of such technical and service problems, it is not uncommon in some communities of the Middle North to be without communications to outside groups for several days at a time. Few locations in the region have any emergency back-up system for use if usual communication methods fail.

7. MEANS OF TRANSPORTATION TO INDIAN HEALTH FACILITIES
APPEAR TO BE ADEQUATE, EXCEPT IN THE MIDDLE NORTH

Indians in southern areas and in developed areas of the Middle North encounter few unusual problems in reaching health facilities, but the travel to health facilities in more isolated areas of the Middle North is more difficult.

(1) Travel to Health Services Is Primarily by Land in
Southern Areas

An adequate network of roads in the southern sections of the provinces makes health facilities generally accessible by land transportation. The automobile is most often used by Indians in travelling to facilities, but alternative means of transportation by bus, rail, and air are available in many communities.

(2) Greater Distances and Fewer Means of Transportation
Make Travel to Health Facilities More Difficult in the
Middle North

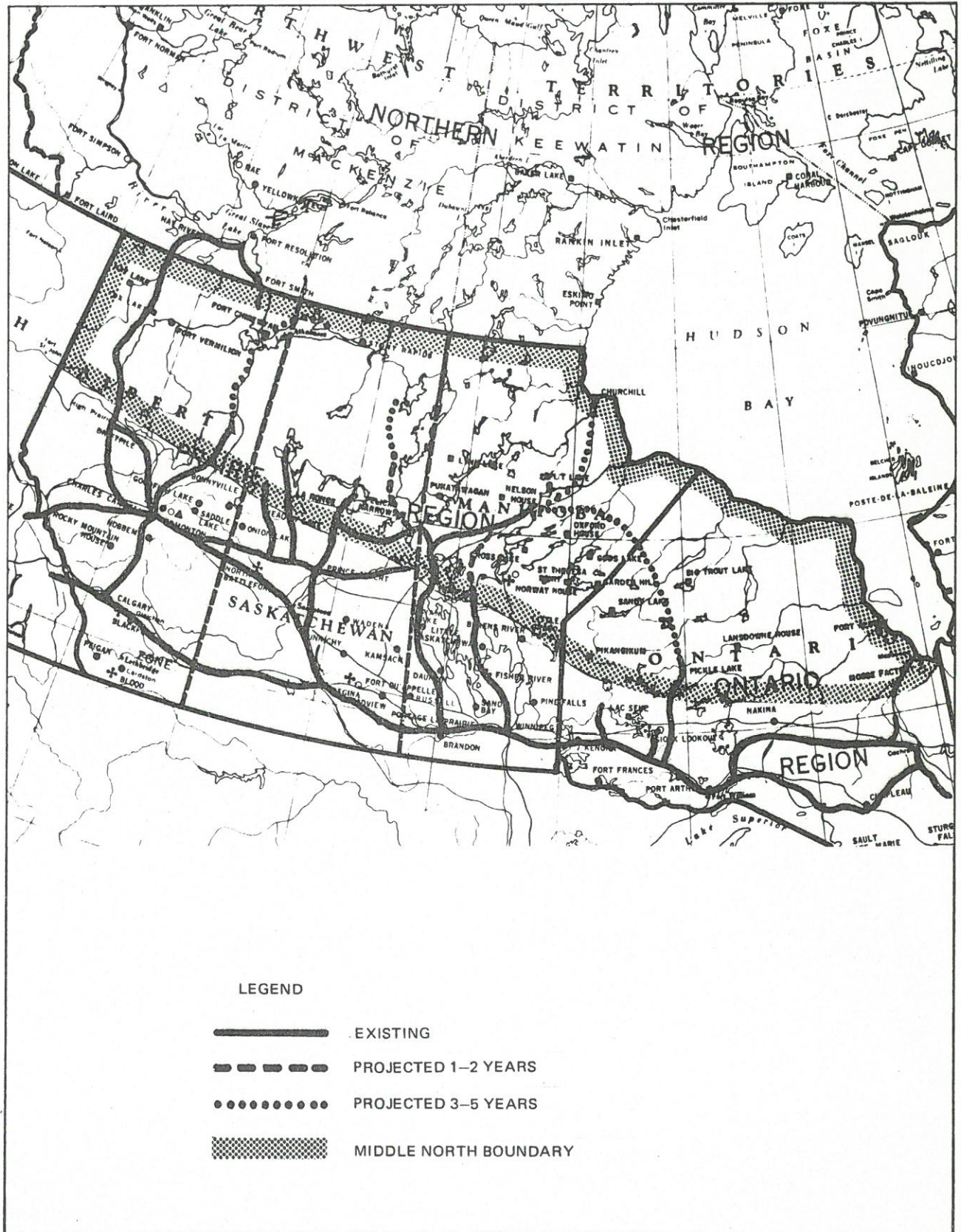
Indians in some areas of northern Manitoba and Ontario can travel by rail to health facilities. Some communities on reserves in the Middle North are connected with outside health facilities by road. In the instance of relatively isolated communities in the Middle North, however, air travel is the principal means of transportation used to evacuate patients to outside health facilities.

Certain communities remain quite isolated, but the degree of isolation is lessening in the Middle North and generally is not severe. A number of roads have recently been constructed and more are planned. Exhibit XLIV, following this page, shows the projected road development in the Middle North.

(2.1) Walking Is the Primary Means of Transportation to and
from Health Facilities Located Within the Reserve

The small number of roads within reserves in the Middle North makes walking the primary means of travel for patients going to the health facility and for field nurses visiting the community. The dispersion of homes causes nurses to spend considerable time walking between sites visited, and the number of home visits declines noticeably in the winter months.

EXHIBIT XLIV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
PROJECTED ROAD DEVELOPMENT
IN THE MIDDLE NORTH



(2.2) Air Transportation in the Middle North Occasionally Is Interrupted

Access to communities usually is interrupted four to six weeks each year during freeze-up and break-up periods. During these times, no air evacuations can be made, except by helicopter, in communities which do not have all-weather landing strips. Inclement weather conditions can further interfere with air transportation between these communities. Difficulties in making regularly scheduled flights to remote communities in the Middle North create problems in planning for the evacuation and subsequent hospitalization of patients.

8. FEDERAL EXPENDITURES FOR INDIAN HEALTH SERVICES HAVE INCREASED STEADILY

Federal expenditures for health services to Indians have increased at an average annual rate of approximately 9% since 1946-1947, the first full year of operation of the Medical Services Branch. From an approximate expenditure of \$4, 100, 000 in the first fiscal year, expenditures have steadily increased, and in the 1968-1969 fiscal year totalled \$27, 300, 000.

Operating expenditures for Indian health services have been increasing at an accelerated rate over the past ten years.

- The average annual rate of increase in expenditures for the ten-year period ending with fiscal year 1968-1969 was approximately 6.6%.

- The average annual rate of increase in expenditures for the five-year period ending with fiscal year 1968-1969 was approximately 8.1%.
- Expenditures increased 12% between fiscal year 1966-1967 and fiscal year 1967-1968.
- Expenditures increased 16% between fiscal year 1967-1968 and fiscal year 1968-1969.

The rate of increase in federal expenditures on Indian health services has consistently been significantly greater than the rate of increase in the registered Indian population. Increases in expenditures for salaries and purchased health services, which include hospital and medical premium payments, have been primarily responsible for the increases in expenditures.

(1) Salary Expenditures Increased 24% in Fiscal Year 1968-1969 Over the Previous Fiscal Year

Salary expenditures have historically represented approximately 35% to 40% of the expenditures for Indian health services. As is shown in Exhibit XLV, following this page, salary expenditures in fiscal year 1968-1969 were approximately \$10,038,000.

Salary expenditures for Indian health services have shown an uneven growth pattern.

- . Expenditures increased 24% between fiscal 1967-1968 and 1968-1969.
- . Expenditures decreased 0.5% between fiscal years 1966-1967 and 1967-1968.

EXHIBIT XLV
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
ANNUAL MEDICAL SERVICES BRANCH EXPENDITURES
ON INDIAN HEALTH FOR FISCAL YEAR 1966-1967
THROUGH FISCAL YEAR 1968-1969

<u>Expenditures</u>	<u>1966-1967</u>	<u>Percent of Change</u>	<u>1967-1968</u>	<u>Percent of Change</u>	<u>1968-1969</u>
Salaries	\$ 8,176,800	-.5%	\$ 8,141,900	24%	\$10,037,500
Patient Travel	1,237,200	6.0	1,312,500	1	1,333,800
Hospital Services	4,032,500	30.0	5,254,000	33	6,961,100
Professional Medical Health Services	3,567,800	21.0	4,300,400	4	4,457,700
Other	<u>4,112,800</u>	14.0	<u>4,679,200</u>	-3	<u>4,503,000</u>
Total Operating Costs	\$21,127,100	12.0	\$23,688,000	15	\$27,293,100
Capital Costs	<u>1,745,700</u>	-18.0	<u>1,427,000</u>	-38	<u>882,800</u>
Total Expenditures	<u>\$22,872,800</u>	<u>10.0%</u>	<u>\$25,115,000</u>	<u>12%</u>	<u>\$28,175,900</u>

Source: Analysis of Indian Health Costs, Medical Services Branch

The small decrease in salary expenditures between fiscal year 1966-1967 and fiscal year 1967-1968 reflects the attempt to decrease Medical Services Branch expenditures on Indian health. The large increase between fiscal year 1967-1968 and fiscal year 1968-1969 reflects the reversal of this policy, together with sizable salary increases.

The average rate of increase in salary expenditures over the last five years has been approximately 8% a year. The increase in salary expenditures in fiscal year 1968-1969 accounted for 52% of the total increase.

(2) Hospital Service Expenditures for Indians Have Increased Substantially in Recent Years

Expenditures for hospital services have risen approximately 73% between fiscal year 1966-1967 and fiscal year 1968-1969. Included in this category are payments of hospital insurance premiums and payments for mental and tuberculosis care in provincial hospitals.

The substantial increase for this purpose is particularly important, as this is the second largest category of expenditures for Indian health services, accounting for approximately 20% to 25% of the total. As is shown in Exhibit XLV, hospital service expenditures in fiscal year 1968-1969 were \$6,961,100.

Expenditures in this category have been responsible for approximately 55% of the increase over the last two years in expenditures for Indian health services.

Reasons for increases in expenditures for Indian health services include the following.

- Provincial hospital rates for mental and tuberculosis patients have increased significantly.

- A more intensive effort has been made to find and hospitalize Indians requiring treatment for tuberculosis or mental illness.

- Involvement in prepaid hospital insurance plans has increased.

- Rates of prepaid hospital insurance plans have increased.

(3) Expenditures for Professional Health Service Have Increased Rapidly in Recent Years

Included in the category of professional health services are contracted services of physicians, surgeons, dentists, ophthalmologists, optometrists, and other technical and professional health services, such as those provided by opticians and radiographers. Prepaid medical insurance premiums and the costs incurred under agreements with universities are also included.

Expenditures for professional services have represented 15% to 20% of the total spent on Indian health care in recent years, and such services therefore represent the third largest category of expenditures. As shown in Exhibit XLV, expenditures for professional health services were \$4,457,700 in fiscal year 1968-1969.

The sharp increase between 1966-1967 and 1967-1968 resulted primarily from a greater use of contracted services, because of the difficulty of obtaining full-time salaried staff for Indian health care facilities. Salary increases in fiscal year 1967-1968 reduced the difficulty of obtaining full-time salaried staff and thus reduced the need to use contracted services.

(4) Expenditures for Patient Travel Have Increased Slowly

Patient travel costs in recent years have represented approximately 5% of the budget. Air evacuation accounts for between 55% and 60% of these costs.

Expenditures for this category in recent years have increased at approximately the same rate as the Indian population. Exhibit XLV indicates that expenditures for patient travel were \$1,333,800 in fiscal year 1968-1969.

(5) Other Operating Expenses Have Increased Unevenly and Slowly

In recent years, the remaining operating costs have represented 20% to 25% of the total operating expenditures on Indian health. In fiscal year 1968-1969, expenditures on other items totalled \$4,503,000, as shown in Exhibit XLV. These expenditures have been growing at an average rate that is just slightly higher than the rate of growth for the total Indian population.

(6) Capital Expenditures Have Shown Substantial Variation from Year to Year

Over the last ten years, capital expenditures have generally ranged from \$900,000 to \$2,500,000 per year, with an average expenditure of approximately \$1,450,000. The substantial variation in expenditures primarily results from variation in the level of expenditure on new facilities and, to a lesser degree, in the level of expenditures for renovating existing facilities.

Capital expenditures on equipment have been relatively constant.

Over the last two fiscal years, capital expenditures have dropped approximately 50%, from \$1, 745, 700 to \$882, 800. Approximately two-thirds of this decrease can be attributed to a decrease in the construction of new facilities.

(7) On the Basis of the Expenditures Made by the Medical Services Branch, Per Capita Expenditures for Indian Health Services Are Lower than the National Average for Such Services

Comparison of per capita health care expenditures for Indians and for other Canadians should be made with caution. It is an oversimplification to assume that registered Indians receive health services only from the Medical Services Branch. Some Indians are entirely self-reliant in providing for their health needs, while others are totally dependent on the Medical Services Branch. In making the calculation detailed in the following paragraphs, it was assumed that the volume of health services received from other sources by the registered Indian population is relatively small compared to those which they receive from the Medical Services Branch. Such an assumption appears justified from observations made in the field and from subsequent analysis.

Such a comparison has limitations but can be useful for indicating a general trend. It appears that the expenditures for health services for registered Indians are not significantly different from, but are probably less than, the expenditures made on health services for the rest of the population. However, the health status of the Indian people is significantly poorer and would seem to require higher expenditures.

Expenditures for Indian health care in 1966 were approximately \$121.50 per capita, on the basis of Medical Services Branch operating and capital expenditures of \$22,873,000 on Indian health in fiscal year 1966-1967 and an estimated Indian beneficiary population of 188,200 at midyear in 1966.

Similarly, on the basis of a 1968-1969 fiscal year expenditure of \$27,293,000 and an estimated Indian population of 199,900 at midyear 1968, the expenditures on Indian health care were approximately \$136.75 per capita in 1968. In that year, per capita expenditure by the Medical Services Branch for this purpose in the Middle North was approximately \$163.00. This estimate is based on an estimated direct expenditure of \$6,760,000 in the Middle North in fiscal year 1968-1969 and on an estimated midyear Indian beneficiary population of 41,500 in that area. The Indian beneficiary population was estimated from the number of Indians living on reserves and crown land.

Although not strictly comparable, data from a recent publication of the Research and Statistics Directorate of the Department of National Health and Welfare indicate that the national rate of expenditure for personal health care was \$140.64 per person in 1968. It is estimated that this expenditure increased to between \$160.00 and \$170.00 per capita in 1968. It should be noted that these estimates do not include as many categories of expenses as do the estimates for the Indian population.

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It appears that the Indian health services program of the Medical Services Branch is generally sound in its concept and adequate in its facilities. A number of limitations in program operations do exist, however, and require improvement.

Insofar as it can be determined, it is likely that the health services available to Indians do not significantly differ from those available to other Canadians living in the Middle North, considering relative degrees of isolation. Whether or not Indians and non-Indians receive comparable care, the health status of Indians certainly is not equal to that enjoyed by other Canadians, and the task at hand is to lessen the difference that exists. The following chapter presents high priority objectives, goals, and recommendations for the improvement of Indian health services.

IV. RECOMMENDATIONS FOR THE IMPROVEMENT
OF INDIAN HEALTH SERVICES

IV. RECOMMENDATIONS FOR THE IMPROVEMENT OF INDIAN HEALTH SERVICES

An improved program of health services with clearly delineated policies, increased emphasis on community development, and upgraded systems of health care delivery should be developed to meet both the present and anticipated health service needs of the registered Indian population. Equally as important, the recommended changes in the Indian health services program, together with major improvements in environmental conditions, should bring the health status of the Indian people to a level consistent with that enjoyed by the rest of the population.

This chapter sets forth recommendations for bringing about improvements in Indian health services and environmental conditions. Presented first is a suggested statement of high priority objectives and goals which form the basis for the more specific recommendations that follow.

Recommendations presented in this chapter should serve as useful guidelines in efforts to improve health services to Indians. Preliminary steps for evaluating and reaching agreement on these recommendations are suggested in Chapter V.

Site visits to observe health conditions and health care delivery in the sample area of the Middle North served as a major basis for the evaluations set forth in Chapters II and III. Consequently, certain of the recommendations presented in this chapter are based heavily upon conditions in the Middle North, but are felt to be generally applicable to the Indian health services program as a whole.

Certain recommendations, particularly those regarding staffing ratios, are defined in such a way as to provide program flexibility in meeting the various and changing health needs of the Indian people. It should be recognized that present shortages in personnel have in part caused the inadequacies observed in some programs. Manpower shortages have severely limited efforts in the more time-consuming programs, such as public health.

The recommendations presented in this chapter fall into two general categories, according to whether they are subject to short- or long-range implementation. Certain of the deficiencies noted in health services and in environmental conditions can be improved in a short time if sufficient resources are available. Other deficiencies, such as the lack of consumer involvement in health services and the lack of education and economic development, will take considerably longer to correct.

1. HIGH PRIORITY PROGRAM OBJECTIVES AND GOALS SHOULD
BE ADOPTED TO GUIDE THE IMPROVEMENT OF INDIAN
HEALTH STATUS AND HEALTH SERVICES

High priority objectives and short- and long-term goals for the attainment of those objectives should be adopted to guide efforts to improve the health of Indians and the health care they receive. The objectives and goals will also be needed to evaluate the progress of that improvement in future years.

A suggested statement of high priority goals and objectives is presented in this section. The statement should be regarded as a flexible document, and as goals are met or new priorities are identified, the statement should be modified.

(1) The Statement of Objectives Should Be Based upon
a Clear Understanding of Program Responsibility

Many of the current limitations of the Indian health care delivery system stem from the fact that responsibility for Indian health services has not been clearly established. One of the first objectives should be to obtain a determination of the federal government's responsibilities in providing Indian health services.

A suggested statement of objectives was developed with the assumption that options would be available which would permit Indians to be served by a health system basically similar to that serving other Canadians.

- (2) The Statement of Objectives Should Be Based upon a Recognition of the Complexity and Wide Scope of Problems Facing Indian Communities and of the Important Interrelationships Among These Problems

The health problems of Indians result more from the poor environmental and economic conditions in which they live than from a lack of health services, although serious limitations of those services tend to complicate the health problems of the Indians. To improve health services without concurrently improving living conditions would be analogous to treating the symptoms rather than the disease.

A broadly-based and comprehensive Indian development program capable of dealing with a wide range of critical problems on a priority basis needs to be developed and implemented. The statement of objectives should define a comprehensive approach to Indian health problems that can serve as a focus and catalyst for the development of a broadly-based, interdepartmental, and interdisciplinary approach to the problems of the Indians.

Such a comprehensive approach to Indian health problems will demonstrate the necessity for effective co-ordination. The Department of National Health and Welfare will need to exercise strong leadership, within and outside of the government, in order to develop the comprehensive approach to the solution of Indian problems.

Exhibit XLVI, following this page, presents a suggested statement of high priority objectives and goals. In each case, the objective is stated first, followed by the goals related to its attainment.

2. THE TREATY RIGHTS OF INDIANS SHOULD BE CLARIFIED
TO FACILITATE THE INDIAN PEOPLE'S RECEPTION TO
FUTURE HEALTH SERVICE PROGRAMS

The federal government has responsibilities to the Indian people, but precisely what those responsibilities are, in the rendering of health services as well as in other matters, remains unclear. In certain parts of the country, the government signed treaties with the Indians. These treaties served to extinguish by agreement the recognized Indians' general interest in the soil. In return, the government accepted certain responsibilities for the Indian people. These responsibilities form the basis of Indian treaty rights.

EXHIBIT XLVI (1)
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**SUGGESTED STATEMENT OF HIGH PRIORITY
OBJECTIVES AND GOALS FOR THE
IMPROVEMENT OF INDIAN HEALTH SERVICES**

GENERAL POLICY OBJECTIVES

1. To urge and actively participate in the development of a clear delineation of federal government responsibility for the provision of health services to Indians.
 - . An immediate goal should be the establishment of the appropriate legal and administrative review mechanisms, at both the federal and provincial levels, which would develop an agreed upon statement of responsibility. This statement will provide the basis for definitive program planning; such a basis is currently lacking.
 - . The statement of responsibility should be forthcoming between one and two years.
2. To develop health services for Indians in a manner which distinguishes them from other Canadian citizens as little as possible.
 - . The eventual goal, to be reached in ten years, should be to have the provinces and the federal government assume, with respect to health services, the same responsibility for Indians as for all other citizens.
 - . If it is decided that Indian health services must, by reason of treaty rights or other considerations, be a federal responsibility, this responsibility should be carried out in a manner which distinguishes the services provided as little as possible from conventional and provincial services. It would be hoped that such responsibility, if found, could be met by the assumption of financial responsibility by the federal government, with the actual provision of services undertaken by conventional and provincial resources wherever possible.
 - . Wherever federal health services exist alongside of provincial and/or conventional health services, immediate steps should be taken to amalgamate and eliminate the federal system.
 - . In areas where customary provincial or conventional health services do not exist and are not likely to be developed, efforts should be made to imitate the conventional system as much as possible:
 - Nonfederal professional manpower should be utilized whenever possible.
 - Federal health facilities should function within the same guidelines and regulations as other facilities in the province.

- As general community and economic development takes place, customary provincial and conventional health services should replace federally provided services, on a planned basis, as quickly as possible. Where such development has not taken place by the end of the ten-year period for meeting this objective, the provinces should be prepared to assume responsibility for those aspects of the federal system that have not been transferred to the provinces or to the conventional resources.
3. To support and work actively to establish a comprehensive and co-ordinated program of Indian development which recognizes the interrelated nature of social, economic, educational, and health problems.
- . It should be recognized by all concerned that without substantial improvement in the total living environment of native people, significant improvement in their health status cannot be expected.
 - . To reach this objective, an immediate goal should be the establishment of a political and administrative mechanism at the federal level which is capable of leading a co-ordinated and comprehensive attack on the wide range of Indian problems.
 - . The goal should be the establishment of a mechanism which can set priorities and effectively co-ordinate policies and programs. Program operations should remain in the government agencies currently providing services to Indians.
 - . As the locus of responsibility for Indian health, welfare, and education programs shifts to the provinces, it would be expected that the mechanism for co-ordination would also shift to the provincial level. This would be expected within a ten-year period if the goal of provincial assumption of responsibility within this same time period is met.
 - . To the degree the federal government remains as a major purchaser of health, welfare, and education services, it would be expected that federal guidelines and standards for the services purchased would continue to apply to health services for Indians in the same manner as for other Canadians.

COMMUNITY DEVELOPMENT OBJECTIVES IN THE HEALTH FIELD

4. To work towards the eventual assumption of responsibility for local health services by Indian communities in a manner similar to the responsibility assumed by other communities.
- . Health facilities and services in Indian communities should come under the control of local boards of native people within ten years. In ten years, it is expected that local facilities and services will be functioning with the same relationships to the provinces as health facilities and services in other communities.

- . An immediate goal should be the closer and more meaningful involvement of health committees in the planning and development of health services. Where health committees do not exist, they should be established. Indian people need to believe in the value of health programs and to regard these programs as their own. Such awareness and commitment can come only through the effective involvement of native people.
 - . Selected administrative responsibilities should be given to the health committees initially and these should be increased until full responsibility is assumed. Prior to the assumption of responsibilities, there should be agreement on their content and scope. For example, an immediate goal should be the preparation of health committees to assume responsibility for the hiring and general direction of community health workers, while such workers remain under the technical and professional supervision of nurses. Before this responsibility is assumed by the band, however, there must be mutual agreement on the role and function of the community health worker.
5. To identify, work with, and support Indian leaders who are interested in developing greater self-reliance and independence among their people.
- . Formal communication meetings with Indian leaders should take place at least monthly at the provincial level. Quarterly meetings should be held at the federal level.
 - . The eventual goal of such frequent contacts should be the close identification of Indian leaders with health service programs.
6. To expand greatly the numbers of native people involved in the provision of health services in Indian communities.
- . An immediate goal should be the training and placement of at least one community health worker in every Middle North community with a minimum population of approximately 100 and community aides in isolated communities which lack other treatment personnel.
 - . On a longer term basis, sufficient numbers of native personnel should be trained to meet at least a majority of the field personnel requirements for direct health services in Indian communities, including professional personnel.
 - . Significant numbers of native people should also be retained at the zone, regional, and national service levels.

HEALTH SERVICE PROGRAM OBJECTIVES

7. To increase substantially the numbers of professional personnel providing health services in Indian communities.
- . An immediate goal should be to increase the compensation of professional personnel (doctors, dentists, and nurses) to levels which exceed those prevailing in southern communities.

- Requirements for additional professional medical personnel should first be met through contractual arrangements with universities and professional associations. Where such arrangements cannot be negotiated, civil service personnel should be recruited.
 - Within five years, sufficient professional personnel should be present to meet the recommended criteria for community coverage.
- 8. To reduce substantially the incidence of disease through effective preventive health programs.
 - Immediate priority should be given to rudimentary improvements in environmental conditions. Within three years, all Indian communities should have adequate sources of pure water and elementary systems of waste disposal such as garbage pits. Virtually all the work should be carried out by native people.
 - Health education, especially in the schools, should receive greater emphasis immediately.
 - In the upper grades and among Indian women, classes in home economics, especially nutrition, should be offered in every Indian community within two years.
 - Within two years, two nurses should be based in nearly every community with a nursing station and the emphasis on health education should be substantially increased. Home visiting for educational purposes should receive particular emphasis.
 - Programs in maternal and infant health need immediate intensification. More frequent home visiting should be undertaken to provide for earlier identification of pregnancy and an opportunity for education in the importance of prenatal and postnatal care of the mother and child.
- 9. To reduce substantially the cultural gap which exists between non-Indian health personnel and the native people.
 - An immediate goal should be the establishment of an intensive orientation program which provides health personnel with an appreciation of Indian culture and means of adapting health services to it. All new employees, as well as present employees who have not received such orientation, should receive this instruction.
 - Within two years, a basic language program for health personnel working in Indian communities should be developed. Incentive compensation should be provided for employees who learn the language of the people with whom they work.

10. To provide Indian people living in remote communities with full-time access to either health services or medical advice and to assure them of reasonable evacuation systems.

- . Full-time voice communication between outpost lay and nursing personnel and medical personnel should be ensured within two years, to the greatest extent possible. Substantial increases in expenditures may be required, but every effort should be made to meet this objective. The conclusions drawn from cost-benefit analysis must be used with great caution and conservatism when human lives and moral and ethical principles are involved. The matter of communications merits intensive study.
- . During freeze-up and break-up in communities accessible only by air, immediate provisions for evacuation should be made. In communities lacking all-weather airstrips, arrangements should be made for helicopter services.

In other parts of the country, the government did not enter into such treaties. In these areas, Indians claim to have continuing basic rights arising out of their original interest in the soil. These rights, they believe, impose certain responsibilities upon the government of Canada.

(1) Interpretation of Treaties Has Caused Resentment and Distrust of the Government Among Indian People

Treaty rights have great importance to Indians as a symbol of self-identity and as evidence of promises made to them in good faith by the federal government. Many Indians feel that federal laws passed subsequent to the signing of the treaties have abrogated basic treaty rights. An example is the Migratory Birds Convention Act, which has restricted what the Indians claim is their unalienable right to hunt for food at any time of the year - a right which they feel is not subject to regulation or legislation.

The government and the Indian people have differed in their interpretations of certain portions of treaties. An example is the "medicine chest" provision of Treaty Number 6 (see page 5), which Indians interpret as their right to free and unrestricted medical and health services from the federal government.

The Indian people claim the federal government has not met the obligations it assumed under the treaties and, in addition, has failed to recognize its breach of promise. Cited as an example is the federal government's failure to provide a school on each reserve when the people desire it, as is called for in some treaties.

Some infringements on their treaty rights are considered by the Indians to be evidence that the government is attempting to eliminate their basic rights. As a result, the Indian people are presently distrustful of the government.

(2) Steps Should Be Taken To Clarify the Status of Indian Treaty Rights

The present conflict over the interpretation of treaty rights causes the Indian people to be suspicious of suggested changes in the methods of providing health care and other services. A clarification of treaty rights would be of great help in bringing about a more receptive attitude among the Indian people.

(2.1) Clarification of Indian Treaty Rights Is Necessary

The Indian people want the issue of treaty and aboriginal rights settled before extensive programs affecting them are

undertaken. Indians have not assumed responsibility for their own well-being and are reluctant to relocate because they fear such actions would further compromise their treaty rights. These attitudes, stemming from unsettled questions of Indian rights, are contributing to the maintenance of the Indian people in an indigent and isolated status.

Because of the unresolved issue of treaty and aboriginal rights and resultant ambiguities regarding federal responsibilities, there is no clear and consistent policy in certain areas of Indian health services. It is not clear, for example, whether all Indians are entitled to free medical care. In the case of those Indians not living on reserves, some have been required to pay for medical care while others, living in comparable circumstances, have not. As long as the extent of federal obligations to Indians remains undefined, there is also potential that less than full effort will be made in providing present services.

(2.2) The Method of Settlement and the Settlement Reached
Concerning Treaty Rights Should Be Mutually Satis-
factory to Both Parties

The method by which the treaties are clarified and the content of the clarified treaties are primarily legal and political concerns. The procedure should be impartial and judicious. The Indian people and the government should have equal representation and participation in the deliberations. It would be hoped that the substance of the clarified treaties would encourage Indian self-determination and eliminate the dependence of the Indian people on the federal government.

At the time the treaties are clarified, the Medical Services Branch should ensure that the question of the Indian people's right to free medical care is resolved. The clarification should include an attempt to achieve uniformity of treaty provisions within each province, so as to provide for consistency within each present political and administrative area and to encourage future efforts in increasing the uniformity of health services to Indians in various parts of the country.

3. THE ROLES AND RESPONSIBILITIES OF THE FEDERAL AND PROVINCIAL GOVERNMENTS IN PROVIDING HEALTH SERVICES TO INDIANS SHOULD BE CLARIFIED

Health services presently are provided to registered Indians at both the federal and provincial levels of government. What co-ordination of activities exists is generally of an informal nature. A comprehensive and effective program of health services will require the clarification of each government's responsibilities.

(1) The Federal and Provincial Governments Disagree on the Extent of Their Separate Responsibilities for the Provision of Health Services to the Registered Indian Population

Outside of whatever responsibilities the federal government may have under Treaty Number 6, neither federal nor provincial government is legally responsible for the provision of health services to Indians.

The provincial governments claim that Indians and matters relating to Indians - health, in particular - are the responsibility of the federal government. In their view, federal responsibility derives from section 91(24) of the British North America Act, which provides that the federal government has legislative authority over "Indians and lands

reserved for Indians." In addition, they claim that Indian health is a federal government responsibility by the authority of section 72(1)g of the Indian Act, which provides the permissive right that "The Governor in Council may make regulations to provide medical treatment and health services for Indians," and by the authority of Section 87 of the same act, which provides that "... all laws of general application from time to time in force in any province are applicable to and in respect of Indians in the province ... except to the extent that such laws make provision for any matter for which provision is made by or under this Act."

The legislative authority under which the Medical Services Branch provides health services to Indians is section 72(1)g of the Indian Act.

Federal government authorities claim that neither the provision of the British North America Act nor the Indian Act entirely precludes provincial legislation with respect to Indians. They claim that the provinces legally retain relative freedom to legislate for the well-being of the registered Indian population and that any restriction

of the application of provincial legislation to Indians may be overcome by federal-provincial-band arrangements. With the positive role usually played by governments in contemporary society, both federal and provincial governments have a moral responsibility to provide for Indian health.

Matters pertaining to health are primarily under provincial jurisdiction in Canada and the provinces are responsible for providing or arranging for the provision of health services to their citizens. Generally, the provincial governments have provided public health services while general treatment services are provided by the conventional resources of private doctors and community hospitals.

The responsibility for providing for Indian health has generally been assumed by the federal government, for reasons stated in Chapters I and III. At present, registered Indians receive only limited health services from the provinces. Most of the provinces appear willing to assume the responsibility for the provision of health services to the Indian population if satisfactory financial arrangements can be made with the federal government.

(2) Health Services for Registered Indians Should Become a Provincial Responsibility

The recommendation that provincial governments assume responsibility for Indian health services implies that the registered Indian would no longer be treated in a manner different from any other provincial citizen. That is, the provincial government would undertake to provide public health services to the Indian people while having treatment services provided by conventional sources.

The federal government's objective of bringing the Indian people into Canadian society so that they will have the same rights, privileges, and responsibilities enjoyed by other citizens is not being served by the present system of providing health care to Indians, since registered Indians do not receive services in the same way as do other citizens of the province. Indians, like other citizens, pay most provincial taxes and are equally entitled to receive services from provincial governments.

As economic development and the non-Indian population of the Middle North expand, conventional treatment services will begin to be provided, thus facilitating the transfer to a single system of provincial and conventional health resources.

(3) Responsibility for Indian Health Should Not Be Transferred to the Provinces at This Time

Because of the unresolved issue of treaty rights, the Indian people are opposed to a transfer of responsibility for health services to provincial governments at the present time. The original treaties were made with the federal government, and the Indian people feel that a transfer of responsibility would circumvent or eliminate their treaty rights.

Indians have found the transfer of responsibility for education to the provinces unsatisfactory in some cases. It is claimed that they are receiving poorer service since the provinces assumed responsibility for education and they fear that a transfer of health services would have the same result. Indians also feel that the provincial governments do not understand them as well as does the federal government.

Traditionally, provinces have undertaken to provide only public health services directly and are not equipped to provide a comprehensive range of direct treatment services similar to those which comprise the present Indian health

program of the federal government. The provinces are unwilling to accept responsibility for Indian health without substantial financial support from the federal government.

(4) Responsibility for Indian Health Services Should Be Transferred to the Provinces Over the Next Ten Years

Transfer of responsibility for Indian health services should take place as conventional treatment resources develop in an area. The provincial governments should not undertake to provide direct treatment services as an interim step.

It is unlikely that within ten years conventional resources will have developed in all areas where the federal government is presently providing direct health services. In these areas, the necessary arrangements should be made with the provincial governments or the Indian people themselves to provide direct treatment services to the Indian population in that area. In such cases the provincial government or the Indian people would assume authority over and responsibility for the present Medical Services Branch manpower and other resources dedicated to the improvement of Indian health in that area. In addition, any agreements for the provision of health services to Indians between

the Medical Services Branch and universities and professional associations would, at that time, become agreements between the universities and professional associations and the provincial governments or the Indian people, as appropriate. Such transfer of authority over and responsibility for present Medical Services Branch resources should be made on a formal and contractual basis.

Where conventional resources exist, the federal government should withdraw from the provision of health services. In these areas, registered Indians should be directed to these resources for treatment and the provinces should provide resources adequate to meet the Indian people's public health needs.

Once responsibility for Indian health services has been assumed by the provinces, the federal government should apply to these services the same quality and cost controls it establishes for other health programs that receive federal financial support.

(5) Consistent With an Eventual Transfer of Responsibility to the Provinces, the Federal Government Should Utilize Other Resources as Well as Its Own To Provide a Comprehensive and Integrated Program for Indian Health

It has been demonstrated and recognized that the Indian people have substantial unmet health needs. There is need for additional health programs and for an improvement in the content and co-ordination of existing health programs to begin meeting those needs now and to facilitate eventual transfer of responsibility to the provinces.

A pluralistic approach involving the federal government, the provincial governments, the Indian people, conventional health resources, universities, and voluntary professional resources should be used to meet the health care requirements of the registered Indian population. This recommendation is made for a number of reasons:

- . The provision of all health services to Indians by the federal government alone is not consistent with the long-term goal of a transfer of responsibility to the provinces and conventional resources.
- . The provinces are not equipped at present to take over sole responsibility for Indian health.
- . High quality manpower can be obtained through the utilization of universities and voluntary professional resources.

A pluralistic approach increases the opportunities for Indian involvement and self-determination.

The Medical Services Branch should develop a clearly defined statement of objectives and policies to provide direction to the Indian health program until such time as the transfer of responsibility to the provinces or the Indian people is completed.

For purposes of developing program objectives and policies, any federal government responsibilities for Indian health that are based on interpretation of the treaties should be considered as financial responsibilities and not as responsibility for providing direct health services to the Indian people.

The objectives and policies established by the Medical Services Branch should be consistent with an ultimate transfer of responsibility for providing direct health services for the Indian people, to conventional resources, the provinces, and the Indian people themselves.

(6) Steps Should Be Taken To Facilitate an Ultimate Transfer to the Provinces of the Responsibility for Indian Health Services

There should be frequent consultation with the Indian people and with the provincial governments to determine how a transfer of responsibility to the provinces can be best

effected. Each of the individual zones and areas of the Medical Services Branch should be given autonomy to adjust its programs to meet varying local conditions. Such a change will facilitate the eventual transfer of responsibility to the provinces and the conventional health system. This autonomy should be provided within a program that is guided by a well-defined statement of priorities and objectives and an effective follow-up and evaluation procedure.

4. A CENTRAL GROUP SHOULD BE ESTABLISHED TO PROVIDE LEADERSHIP FOR THE DEVELOPMENT AND OPERATION OF A CO-ORDINATED PROGRAM FOR THE BETTERMENT OF ALL ASPECTS OF INDIAN LIFE

The interrelated nature of the social, economic, educational, and health problems facing native people requires a more co-ordinated approach than presently is being taken.

(1) The Agencies Presently Involved in the Provision of Services to the Indian People Should Be More Effectively Co-ordinated

A number of agencies provide or could provide services to assist in the advancement of the Indian people. Among the more notable are the Indian Affairs Branch and the Indian health services program of the Medical Services Branch.

Other agencies, such as the federal economic development agencies, the provincial health and welfare departments, and private organizations such as the Indian and Eskimo Association could contribute substantially to the advancement of the Indian people.

At present, the efforts of these agencies concerning the Indian people are not being co-ordinated effectively. Co-ordination of the various agencies and their programs is essential, since the areas they are designed to improve, such as health, economic, and environmental conditions, are highly interrelated. An improvement in any one area will be lasting only when there is an accompanying improvement in all other areas.

The present lack of co-ordination has resulted in a duplication of services in some areas and the absence of services in others. The potential improvement in the quality of life of the Indian people is not being realized. The lack of co-ordination is also responsible for higher costs for the provision of Indian services.

The disjointed nature of present efforts to improve Indian health services is manifested, for example, in the lack of co-ordination between treatment services and improvement of environmental conditions. While most aspects of environmental health are the responsibility of the Indian Affairs Branch, curative medicine and the more traditional aspects of public health are the responsibility of the Medical Services Branch, and these two branches have not adequately co-ordinated their programs. The health and living conditions of the Indian people could be significantly improved if a co-ordinated effort was made to bring about simultaneous improvement of all aspects of the Indian environment.

(2) A Single Group Should Be Made Responsible for the Co-ordination of Programs for the Betterment of the Indian People

Leadership and direction for all programs affecting the Indian people should be provided by a single group that is independent of the organizations and agencies it co-ordinates. This group should not be involved in the direct provision of services, but should rely on the Indian Affairs Branch, the Medical Services Branch, and other agencies for program implementation and operation.

The group should be responsible for:

- . Establishing basic philosophy and policy guidelines for programs that affect the Indian people.
- . Establishing priorities so that the most important needs and requirements of the Indian people are met first.
- . Maintaining a balanced approach to the solution of the problems facing Indian communities.
- . Co-ordinating activities designed to raise the Indians' standard of living.
- . Determining where Indian programs should be carried out in the government organization.
- . Promoting development of services where a need exists.
- . Assisting in the establishment of new programs.
- . Evaluating the effectiveness of programs designed to assist in the advancement of the Indian people.

The group should be relatively small, but able to draw on the professional and technical expertise of the various agencies, especially the Indian Affairs Branch and the Medical Services Branch.

The Indian people should be officially represented in the group, comprising at least one-third of its membership. The members of the group should be young, progressive,

and sensitive, having a good understanding of and rapport with the Indian people. They should be dynamic and incisive and should possess a realistic and balanced view of the ways in which the Indian people can be advanced.

It is important that the members of the group bring new approaches to Indian problems and that they be free to break the ingrained and traditional thinking that often characterizes social programs that have been functioning for some time.

Location of the newly created group in the government structure should be decided after further investigation, however, it should be sufficiently high in the government organization that it can effectively co-ordinate action at all levels. The agency could serve as an effective co-ordinating mechanism for the implementation of the recently announced policy of the Department of Indian Affairs and Northern Development.

5. THE COMMUNITY DEVELOPMENT APPROACH SHOULD BE USED EXTENSIVELY IN THE PLANNING AND IMPLEMENTATION OF PROGRAMS DESIGNED TO IMPROVE INDIAN HEALTH SERVICES

The involvement of native people in developing and implementing solutions to their own problems will develop pride in community programs, overcome resentment, and enhance program effectiveness.

(1) The Community Development Approach to Improving Living Conditions in Communities Attempts To Motivate and Assist People To Help Themselves

The community development program is the attempt to improve the economic, social, and cultural conditions in a community so that it is brought into the life of the nation and contributes fully to national progress. Community development implies self-determination by the people in a community. It also implies a partnership between the people and the government to effect progress in areas such as education, employment, housing, and health.

Community development efforts attempt to eliminate basic differences in living conditions among communities and to improve the total environment of a community so that the people can achieve full and equal participation in society.

(1.1) The Problems Existing in Indian Communities Are of the Type That Can Best Be Resolved by a Community Development Approach

A number of conditions indicate that the Indian people are not participating fully and equally in Canadian society:

The high degree of unemployment and under-employment indicates that Indian potential has not been fully utilized.

- . The Indian people require a disproportionate amount of public assistance.
- . The communities in which the Indian people live are generally substandard.

Failure in the past to develop self-determination and responsibility among Indian people accounts in large measure for the present lack of leadership and progress in Indian communities.

(1.2) A Successful Community Development Approach Will Depend on the Creation of Proper Relationships and Attitudes

A partnership of the Indian people and the government based on mutual trust and confidence will need to be developed. At present, such a relationship does not exist.

Indian self-determination will be realized only as effective Indian leadership and self-government develop and this will occur only as the Indian people begin to assume responsibility for their own destiny. Government agencies should work closely with the Indian people, support their leaders, and work actively towards the goal of self-government.

In areas where the Indian people are expected to exercise responsibility, they should be provided with commensurate authority so that self-determination exists in fact. The Indian

people will need to be allowed to make the decisions that influence their well-being. It can be expected that they will make errors in judgement as they develop their decision-making ability, but this should be regarded as part of the learning process.

(2) Indian Communities Should Ultimately Assume the Same Responsibility for Their Health and Health Services as Other Communities Assume

Indian involvement and participation in both the planning and operation phases of health programs should be encouraged.

Health committees should be established in every community. Within ten years, these committees or boards should assume responsibility for local health services and facilities and should operate much as similar committees in other communities do.

The Indian people need to understand and believe in the principles of good health. The gradual transfer of responsibilities to native health committees will help to prepare the Indian people to assume responsibility for their own health. With that responsibility will come a greater awareness of the principles of good health.

Immediate attention should be given to preparing native health committees to assume the responsibility of hiring and generally directing community health workers. The field nurse should continue professional and technical supervision of the community health workers after the committees begin to exercise their responsibility for general direction of the workers. The nurse's authority over the community health worker should be made clear to the worker and to the Indian people, particularly to the band council and health committee. The nurse should not exercise close supervision over the community health worker, but should provide more guidance than is generally the case at present.

6. SIGNIFICANT IMPROVEMENTS SHOULD BE MADE IN THE OPERATIONS OF INDIAN HEALTH PROGRAMS. IN CONCEPT, THESE PROGRAMS ARE GENERALLY SOUND

The major health and medical programs of the Indian population have been identified and described in the previous chapter. Several of the more important problems identified were:

- The long delays that are often encountered before routine medical care is received.
- The lack of effective emergency medical care in some locations.

- The almost complete lack of any kind of medical care in some communities.
 - The difficulty of obtaining care at night or on weekends in some locations.
 - The inadequacy of programs designed to prevent illness and disease.
 - The inadequacy of manpower resources.
 - The lower health status of Indians than the rest of the population.
- (1) Increased Emphasis Should Be Placed on the Development of Public Health Programs for Indians

The present public health program is effective only in certain program areas, such as immunization, and this effectiveness varies among communities. Curative medicine alone cannot satisfy the total health needs of the Indian population.

The health status of the Indian people can be substantially improved through the implementation of an effective public health program.

- (1.1) Public Health Programs Should Attempt To Create a Receptive Attitude Among the Indian People

Public health programs should be geared to the individual needs of each Indian community and, to the extent possible, should

reflect the expressed needs of the Indian people. Programs should be consistent with the level of social and economic development in each Indian community.

(1.2) Health Education Programs for the Indian People
Should Be Increased Substantially

Existing programs have not met health education needs. The limited success of many Indian health programs can in part be attributed to the lack of understanding of the need or purpose of the program by the people.

Comprehensive health education programs should be developed, with particular emphasis on:

- . Personal hygiene
- . Home cleanliness
- . Dietary and nutritional needs
- . Family planning
- . Sex education

Programs that help an individual to recognize sickness and know when to seek medical assistance, and that help a family to recognize and treat minor illness and injuries in a medically acceptable manner in the home should also be undertaken. Much of health education will need to take place in the home, at least initially, to gain the acceptance of the Indian people.

The materials used in an Indian health program should be designed specifically for Indian communities, and the ideas expressed in such materials should be appropriate to the social and economic conditions that exist in those communities. The materials should be available in the native language or should be illustrated pictorially so that a knowledge of the English language is not required to understand the idea expressed in the materials. The method of distribution should be improved to ensure that each Indian community receives a supply of all materials and that these are given out or displayed effectively.

(1.3) School Health Programs Should Be Expanded

The school curriculum should place increased emphasis on practical aspects of personal and environmental health. The adoption of good health habits is as important to the social and economic advancement of the Indian people as is the elimination of their educational deficiencies.

The public health nurse should be responsible for directing health education programs in the schools. She should devote 15% to 20% of her time to this program.

Where possible, habits of personal hygiene should be developed and practised at the school, especially in the lower grades. Facilities and time should be provided for the cleaning of teeth and for showering. If necessary, the public health nurse or the community health worker should be responsible for carrying out this program.

(1.4) Public Health Manpower Resources Should Be Increased Substantially

Guidelines for staffing public health programs must be flexible, as needs will vary with the conditions in each community. It is suggested that the following criteria guide staffing efforts.

Each Indian family in established Indian communities of more than 50 people should receive regular home visits by a nurse with public health training and by the community health worker. Where it is not possible to obtain a qualified public health nurse, a registered nurse who has been trained in basic aspects of public health during her orientation period should be employed.

Steps should be taken to provide one full-time nurse with public health training for every 700 persons in the Middle North.

Such staffing would allow a public health nurse to make a two-hour visit to each family in her area four times a year, if:

- . The nurse is able to devote approximately 50% of her time to home visiting.
- . She is working an 8-hour day, 5 days a week for 50 weeks a year.
- . There is an average of approximately six persons in each family.

In areas outside of the Middle North, one public health nurse should be provided by either the federal or provincial government for each 1,500 persons. Such staffing would allow a public health nurse to make a visit lasting 1 1/2 hours to each family in her area three times a year, assuming the same working hours and average family size as in the Middle North and assuming that she is able to devote approximately 60% of her time to home visiting.

Steps should be taken to provide one full-time community health worker for every 500 Indians in the Middle North, with a minimum of one worker in each Indian settlement with a population of more than 100. It is recognized that in smaller communities this would not be a full-time position.

For a population of approximately 500 people, such staffing would allow a community health worker to make a visit lasting 1 1/2 hours to each family in her area 12 times a year, assuming:

- . The person works 8 hours a day, 5 days a week for 50 weeks a year.
- . That the person has 80% of the time available for home visiting.
- . That there is an average of approximately six persons in each family.

In areas outside of the Middle North, steps should be taken to provide a community health worker in each Indian settlement with a population greater than 500 people.

(2) Although the Present Indian Health Treatment Program Is Conceptually Sound, Improvements Should Be Made, Particularly in the Area of Personnel

The concept of a health care delivery system based on the provision of care through five types of facilities of varying complexity is conceptually sound and should remain the basis of future delivery of health care to Indians. The primary deficiencies that have been identified in the treatment program are related to the quantity and quality of personnel.

(2.1) Indians in All Established Settlements Should Have Continuous Access to Trained Medical or Paramedical Personnel

Since emergency medical service is usually required because of some unforeseen event, it is imperative that there be continuous access to trained medical or paramedical personnel. Where local conventional medical resources exist, the Indian people should be encouraged to use them. Duplication of facilities and personnel to provide for Indian health should be avoided, if at all possible. The Medical Services Branch should undertake to provide trained personnel until they are provided by provincial or conventional sources.

(2.2) A Well Trained Community Aide, as Presently Defined, Should Be Provided in Small Isolated Communities That Do Not Have Ready Access to Other Medical Resources and Where It Would Not Be Practical To Provide a Registered Nurse on a Full-Time Basis

Small communities that are remote from some form of full-time professional health service should be served by a community aide, who should be allowed to dispense, at his own discretion, only simple nonprescription drugs. He should be required to confer with a nurse or a doctor before issuing prescription drugs.

The community aide should be supervised by a registered nurse who visits the community regularly. The nurse's responsibility for the community aide should be clearly delineated and communicated to the community aide and the Indian people, particularly to the band council and the health committee. Continuous communication with a registered nurse or doctor via telephone or radio should be available. Improved communication facilities should be provided, where necessary to accomplish this.

It is recognized that recommendations for deployment of one community health worker to each Indian settlement of more than 100 and deployment of community aides to small, isolated communities that do not have access to other medical resources may result in the assignment of both a community health worker and a community aide in some isolated communities of about 100 population. However, it is recommended that the staffing guidelines for the two positions be followed for these reasons:

The employment of two native health personnel, when it does occur, will strengthen Indian involvement in the health services programs in their communities.

- . The job descriptions for the two positions are not duplicative. The community aide administers first aid treatment and serves as a communication link between the community and health professionals. The community health worker is responsible for certain public health programs, which this report has indicated to be time-consuming but important efforts.
- . The two positions may serve as entry to more highly skilled and even professional health careers, and employment of numbers of native people will increase the likelihood that Indians will become capable of ministering to their own health needs.
- . The costs of employing community health workers and community aides are low enough that employment of two native people in a small community, when it does occur, will not be prohibitive. Both types of native workers can be employed on a part-time basis.

(2.3) A Full-Time Registered Nurse Should Be Located in Isolated Communities Where It Is Difficult To Evacuate Patients and Where the Treatment Load Justifies a Full-Time Health Professional

It is recommended that a treatment nurse be located in isolated communities of approximately 500, in accordance with present standards. Consideration should be given to locating a full-time nurse in smaller communities as the degree of isolation increases. From these communities, she should cover smaller, surrounding settlements. It is expected that she would serve a total population of approximately 1,000 to 1,200.

Wherever possible, a minimum of two nurses should be located in each nursing station to assist one another. One nurse, however, should be designated as having primary responsibility for treatment services and the other as having the primary responsibility for public health services.

(2.4) Arrangements Should Be Made To Provide for Regular Physician Visits in Isolated Communities Where Physicians Are Not Practising in the Area

Recommendations for visits by physicians to isolated communities are to be regarded as guidelines, variable according to the needs of individual communities.

Isolated Indian settlements with a population of between 50 and 100 should be visited by a doctor approximately one day each month. Settlements with a population of more than 1,000 should have access to a doctor on an approximately full-time basis. Such communities should serve as regional bases from which physicians would visit smaller communities.

Isolated Indian settlements with populations of between 100 and 1,000 should be visited by a doctor one full day a month for every 120 of population. This arrangement would allow a

doctor to see each person three times a year, assuming that he can see 30 patients each day he visits the community.

The doctor should use a clinic approach in those communities he visits. House calls should be discouraged. The visiting doctor should use a centrally located hospital or nursing station as a base for operations. His visits to other Indian settlements would be co-ordinated by the nurse and community aides.

While visiting each community, the physician should be accompanied by a nurse from the local nursing station. The nurse would assist the doctor and would also provide an increased degree of continuity to the program. This is particularly important when the same doctor does not return to the community each time or when the nurse must provide follow-up care.

In his visits to the Indian communities, the doctor should attempt to provide preventive medicine instruction for his patients at the time of treatment and should consult regularly with the nurses to advise and assist them in their work.

(2.5) Dentists Should Make Regular Visits to Isolated Communities Where Other Dentists Are Not Readily Available

Each isolated Indian community that does not have access to other dental care resources should be visited twice a year by a dentist. Each visit should last for approximately three days for each 100 of population in the community. Such staffing would allow each Indian to see a dentist twice a year, assuming that the dentist can see 30 to 35 patients a day.

As a result of the shortage of dentists employed in Indian health services, the dental health program places too much emphasis on extraction and must ignore the preventive and restorative aspects of dentistry. To correct, in part, the focus of the program, a public health dental program should be developed and instituted in all Indian communities.

The lack of preventive dental care in the past and the infrequency of care resulting from the manpower shortage has created a large backlog of needs. The recommendations for scheduling visiting of dentists are sufficient to maintain dental health. More dentists would be needed initially to cope with the backlog of cases and to raise dental health to a desirable level.

(2.6) Regular Ophthalmological or Optometric Services
Should Be Provided in Isolated Communities Where
Other Such Resources Are Not Available

Each isolated Indian community should be visited once a year, and visits should be long enough to allow the population to be adequately examined.

(2.7) Improved Procedures Should Be Established for
Monitoring and Communicating a Patient's Progress

Follow-up procedures are needed to allow the doctor or nurse to monitor a patient's progress after treatment, to ensure that the patient is responding to medication and is being rehabilitated to his environment. Improved procedures should be developed to inform a hospital patient's family and the nurse in his community of his progress while in the hospital.

7. CHANGES SHOULD BE MADE IN THE ORGANIZATION AND
MANAGEMENT OF THE INDIAN HEALTH SERVICES PRO-
GRAM OF THE MEDICAL SERVICES BRANCH

Because the present Indian health services program lacks focus and objectives, direction, and control, it is not making the progress that is possible. Improvements in the management function will enable the branch to serve the Indian people more effectively.

(1) Authority and Responsibility Should Be Clearly Delegated at the Top Management Level of the Medical Services Branch

The lack of clear delegation of authority and responsibility at the top management level of the Medical Services Branch has resulted in the direction of insufficient attention to Indian health services. Each member of branch top management should be made clearly aware of his authority and responsibility with respect to Indian health services. To facilitate this, a detailed job description should be developed which clearly outlines each officer's authority and responsibility.

(2) The Locus of Authority in the Indian Health Activity Should Be at the Lowest Level Consistent with Effective Supervision and Control

When responsibility for health services is transferred to the provinces, conventional health facilities, and the Indian communities, health care programs will be operated to meet the specific needs of local communities. A decentralization of authority would facilitate the ultimate transfer by allowing health programs to be more responsive to local conditions.

The regional levels of the branch appear to have a high degree of decision-making autonomy in some areas at present.

This autonomy has developed because they were given substantial authority without an accompanying clearly defined statement of objectives and responsibility.

Effective decentralization will require the formulation of a comprehensive but flexible set of objectives, policies, and procedures. Each region should set program goals within the established objectives provided by the Medical Services Branch head office and the central agency to be established.

- (3) A Planning Process Should Be Developed Which Provides for Identification of Health Service Needs, Defines Program Requirements, Sets Program Objectives and Goals, and Monitors Progress

A comprehensive and standardized data system that collects, integrates, and displays data will be essential to an efficient and effective planning process. The data would be used for identifying Indian health needs and evaluating the operating effectiveness of Indian health programs.

To perform these functions, the data system should collect information such as the following for each region, zone, area, and facility, where appropriate.

- . Continuing standardized morbidity and mortality data by disease category for Indians.
- . The number of nurse, doctor, dentist, and ophthalmologist, or optometrist visits and public home visits.
- . The number and type of facilities and personnel in each geographical area.
- . The type of health services, such as immunization and well baby clinics, being provided in each community and the volume level at which they are being provided.
- . Cost and other financial data. These data should be presented in such a manner as to facilitate financial planning and management analysis.

The established standard or objective for each category of information should also be indicated on management reports to facilitate the comparison of performance with the standard or objective.

The central agency that has been recommended, the head office of the Medical Services Branch, and the decentralized regions, zones, and areas should have ready access to appropriate information from the data system, so that they can determine Indian health needs and the programs required to meet these needs.

The data system should be used as a tool in setting, reviewing, and revising program objectives and evaluating the results of programs in terms of established objectives.

A clear statement of objectives should be developed for each health service subprogram, such as immunization, maternal and infant health, and dental public health. These will provide direction for the subprogram and permit the evaluation of its operating effectiveness. The following are examples of subprogram objectives for the first year:

- . Routine immunization of 90% of Indian infants.
- . Administration of routine booster shots to 85% of preschoolers.
- . Instruction of 75% of mothers on infant feeding and infant care.
- . Periodic health examinations, six times during the first year of life, to 90% of infants.
- . Instruction to 50% of mothers on home cleanliness and home management.
- . Practice of dental hygiene in schools by 75% of Indian children.
- . Provision of showers in schools for 40% of Indian children each week.

The planning process should permit regions, zones, and areas to develop and suggest alternative means of meeting

established objectives and should provide for a periodic review of objectives and policies.

(4) Supervision and Control Within the Organization Should Be Improved

The absence of well-defined statements of policies, priorities, and objectives and an effective follow-up and evaluation system is reflected particularly in the need for improved supervision and control. Each level has assumed an excessive degree of autonomy because it has been given substantial authority without a clearly defined statement outlining its responsibilities.

Improvement of the supervision and control function should begin with the establishment of objectives and goals, the determination of priorities, and the establishment of an adequate evaluation system.

Supervision of staff at the field level has been inadequate. Nurses and native personnel should receive sufficient direction and supervision to ensure that they are adequately performing their functions as originally conceived. In addition, increased professional medical supervision and consultation with the field staff should be made available.

8. THE QUALITY AND NUMBER OF PERSONNEL PROVIDING
HEALTH SERVICES TO INDIANS SHOULD BE INCREASED

Correction of the following conditions would contribute significantly to the improvement of manpower resources:

- The present low salary schedules for professional personnel.
- The lack of special status or distinction attached to employment in rendering health services to Indians.
- The relative lack of opportunities for personal and professional development and achievement, especially in isolated locations.
- The limited social and cultural outlets in isolated locations.

(1) Programs for Increasing the Supply of Professional
Health Personnel Should Be Developed

The lack of an adequate number of professional personnel is seriously affecting the quality of health services rendered Indians.

(1.1) First Efforts To Increase the Number of Medical
Personnel Should Be Made Through the Development
of Agreements with Universities and Professional
Associations

Medical personnel from universities and associations should be used only where the co-operating group assumes

responsibility for providing medical personnel on a continuing, long-term basis. To ensure understanding, firm contractual agreements which clearly delineate the extent of each party's responsibility, should be entered into on a formal basis.

A program for increasing university involvement and responsibility in the provision of health services to Indians should be developed. The universities should be encouraged to "adopt" various facilities for Indian health, preferably hospitals, by providing personnel for these facilities on a continuous basis. While the greatest need is for medical personnel, the agreements should also include other professional and paramedical personnel. In particular, the Medical Services Branch should investigate the feasibility of agreements with nursing schools.

Agreements with universities should provide medical coverage for Indians in specified facilities and their surrounding service areas. Hospitals would be the logical base of operation. From the hospital base, the university personnel would regularly visit communities which had nursing stations and health stations.

Agreements with medical associations should also be negotiated to provide health personnel in isolated areas on a rotation basis. Contractual service agreements with the dental and ophthalmological associations should also be sought. Personnel serving in isolated regions under these agreements should be rotated after eight to ten weeks.

Frequent rotation of medical personnel will make imperative the establishment of a well-documented medical information system and the implementation of standardized procedures, if there is to be continuity in care and medication. Further, it will be necessary for the Medical Services Branch to develop a mechanism for monitoring the care being provided under the agreements.

Private physicians who wish to provide service to the Indian people in particular areas on a temporary basis should be encouraged to contact their professional associations to ensure that their efforts are co-ordinated with those of the university and professional associations.

(1.2) Where Agreements with Universities and Professional Associations Are Not Practical or Possible, Efforts To Recruit Full-Time Departmental Medical, Dental, and Nursing Personnel Should Be Improved and Intensified

Efforts to recruit young physicians should be increased. Representatives of the Medical Services Branch should visit medical schools and teaching hospitals to recruit interns and residents and to speak to student medical associations about employment with the Medical Services Branch. Such efforts should stress the opportunity to obtain a wide range of clinical experience, and the federal government should be prepared to offer some form of special incentive to attract young physicians.

Similarly, increased efforts should be made to recruit dentists. Recruitment efforts for dentists will likely be quite successful after a substantially improved and realistic salary schedule is adopted.

Ways should be found to bestow distinction upon those providing health services to the Indian population, especially in isolated areas. The branch should advertise regularly in professional journals to recruit and to establish a positive

image with the professional community. The active endorsement and continuing support of the program by the Prime Minister or a cabinet minister would provide added status and distinction to employment in Indian health services. Such active support should be made widely known, especially among professional health personnel.

Emphasis should be placed on developing a means for professional staff to obtain personal and professional advancement while in the service. Regular attendance at professional conferences should be arranged and contact with the university doctors and with the universities having agreements with the Medical Services Branch should be encouraged.

(2) The Levels of Compensation for Medical and Nursing Personnel Should Be Increased Immediately

To raise compensation levels of professional personnel to those prevailing in comparable positions outside of the Medical Services Branch, it appears that increases should be in the range of 20% to 25% for nurses and 25% to 35% for physicians and dentists. An increased degree of progression should be introduced into the salary schedule.

Personnel employed by the Medical Services Branch in the Middle North should receive higher compensation than do comparable personnel in the southern portion of Canada. Improvements in the fringe benefits for professional health personnel working in isolated areas should also be made.

Health professionals will not be motivated to join the Medical Services Branch for compensation alone and an increase in salaries will not completely eliminate the chronic problem of a shortage of competent professional personnel.

(3) Orientation Programs for Professionals and Non-Indian Personnel Providing Health Services to Indians Should Be Expanded and Improved

The orientation program should provide the health worker with an understanding of the local cultural and social characteristics of the native population, so that he can better relate to the Indian people and interpret and understand their actions.

Improper attitudes in regard to the native population constitute a serious problem in Indian health services. Although most health professionals have a sincere interest in the problems of the Indian people, many exhibit a patronizing or condescending

attitude which unwittingly results in a superior-inferior relationship. This in part is a natural product of a system where one group of people are the providers of a service, while a separate and distinguishable group with unique and less sophisticated characteristics are the users of the service. The employment of more native people in the provision of health services to Indians should be pursued to help eliminate this problem.

The orientation should also provide sufficient training to nurses so that they can meet the basic medical needs of people living in isolated communities that do not have frequent access to a doctor. Nurses in such circumstances must assume responsibility for providing treatment services beyond that for which they were trained. They should be provided with additional education so that they can better accept and exercise the responsibility that they are expected to assume.

Such medical training would be best provided at a hospital when the pedagogical assistance of university personnel can be obtained.

(4) Steps Should Be Taken To Increase the Number and the Effectiveness of Native Health Personnel

Native health personnel who do not face cultural and language barriers should be employed wherever possible. Emphasis should be placed on developing enough native health personnel so that, on a long-term basis, Indians are educated and trained to fill at least half of the field personnel requirements for providing direct health services in Indian communities, including professional personnel. As a first step, active encouragement and assistance should be given to Indians who wish to train as nurses and nursing assistants. The community health worker and community aide positions provide excellent opportunity for upgrading native personnel for entry into professional classifications.

Native health personnel should be carefully selected. The band council should be actively involved in the selection process and the persons chosen should have rapport with the native people, and influence with them, and should be natural leaders. The native health person should have the active support of the band council. Where necessary, the council should be encouraged to pass bylaws that would give the native health person recognized authority in the community.

In time, the community health worker should come under the general direction of the band council or health committee while continuing to receive professional and technical direction from the nurse.

Steps should be taken to provide native health personnel with refresher courses on a continuing basis.

9. FACILITIES FOR THE PROVISION OF HEALTH SERVICES TO INDIANS IN THE MIDDLE NORTH ARE GENERALLY ADEQUATE, BUT IMPROVEMENTS SHOULD BE MADE IN BOARDING FACILITIES AND COMMUNICATION AND TRANSPORTATION SYSTEMS

The health facilities observed in the Middle North were found to be generally adequate for the purposes for which they were intended.

(1) The Health Facilities System Should Be Based Upon a Regional Concept

For the purposes of developing a system for health delivery, the Middle North area should be considered as being divided into a number of loosely defined regions. A hospital, either federal or conventional, should be located in each region. There should also be several nursing stations and health stations, where warranted.

Generally, as is presently done, a nursing station should be provided in isolated communities with minimum populations of approximately 500 people where there is not reasonable access to any other health resources. Consideration should be given to providing nursing stations in smaller communities as the degree of isolation increases.

A health station should be provided in isolated Indian settlements with minimum populations of approximately 100 people, when no other health resources are available:

- . A health station allows professional personnel to stay in a community for several days at a time.
- . It provides a base from which health personnel can work.
- . It is a relatively inexpensive facility.

A hospital should be the primary facility in each region, and a region should consist of the area that can logically be covered from the hospital. The nursing station should use the hospital for referrals and as a source of direction and guidance. The nursing station should have continuous access to the hospital via telephone or radio.

In communities having a health station, voice contact with nursing stations and hospitals should be made through the communication facilities of the community aide or lay dispenser in that community. Where possible, the health station should be located in some constantly supervised building such as a school.

In regions whose base is a community hospital rather than an Indian hospital, appropriate arrangements should be made for the community hospital to assist and guide the nursing station and health station personnel at all times.

A minimum of two nurses, with at least one having public health training, should be assigned to each nursing station, wherever possible.

- . The public health requirements are sufficient to require the equivalent of a full-time nurse.

- . Such staffing would allow the personnel to assist one another and thus better manage the large responsibilities placed upon nurses in nursing stations.

- . Such a plan would facilitate recruitment of staff for isolated nursing stations because responsibility would be shared and companionship would be provided.

To the extent possible, new facilities should be mobile. It is hoped that, in time, economic development will take place in the Middle North. With the resulting influx of population and increased economic vitality, conventional resources for health care would be established, making permanent Indian facilities obsolete. In cases where economic development does not take place, it would be hoped that Indians would move to more economically viable areas and they should be encouraged to do so. If permanent facilities were constructed, their existence might discourage bands from relocating. If the band does relocate subsequent to the construction of a permanent facility, that facility would no longer be usable.

(2) The Hostel System for Boarding Patients Prior to Hospital Admission and After Discharge Should Be Improved

The Medical Services Branch should actively and continuously arrange for hostel facilities to be available for boarding patients who require no medical or nursing care. If it is not possible for hostels to be associated with a hospital, they should generally be hotels or private homes.

Certain patients would benefit from boarding in a hostel that is associated with the hospital. This is particularly true of obstetrical patients, who can receive valuable health education in maternal and child care both before and after delivery.

The branch should pay for hosteling patients in only those facilities that have been designated as having met some minimum standards. Any facility that meets minimum standards should be eligible for designation as an acceptable hostel if the owners or operators so desire. Generally, the branch should not own hostel facilities that are not associated with hospitals.

(3) The Feasibility of Providing Convalescent and Custodial Facilities Should be Investigated

The high cost of maintaining patients in hospitals makes it wise to investigate the actual need for and the economics of a convalescent type of facility for patients requiring less than acute care.

The feasibility of establishing custodial homes for native people should be investigated as well. Generally, construction of these facilities could be similar to a small motel, with care

provided in the activities of daily living. At present, many elderly Indian people are not receiving adequate attention in the homes of their children, and in addition, contribute to the heavy dependency load found in Indian families. Where possible, custodial facilities should be provided within the Indian community.

(4) Communication Systems Should Be Improved

Communication facilities should allow full-time contact between community aides and both nursing stations and hospitals, and between nursing stations and hospitals.

The provision of adequate communication facilities is a very complex problem. A limited study of communication problems is presently being made for the branch by the Department of Communications.

It is recommended that a complete study of communication requirements and ways to meet these requirements be made. As an interim measure, it appears that telephones should be used where feasible and, where radio communication is necessary, the radio should have several channels to circumvent a temporary blackout on one channel because of atmospheric conditions. The radio should have a range of 300 to 350 miles.

(5) Transportation Facilities for Local Traffic and for
Evacuation of Patients Should Be Improved in the
Middle North

Roads within Indian communities should be developed and improved. The present lack of adequate internal roads limits home visiting by nurses and makes it more difficult for Indians to get to the health facility. The existence of internal roads would also facilitate installation and use of a garbage collection system. As a prerequisite for receiving welfare payments, unemployed able bodied men should work in the construction of internal roads.

Health professionals should be provided with some mechanized means of transportation, such as a car or power toboggan, to make travel in Indian communities more efficient and thereby increase the time available for administering health care.

Responsibility for the cost involved in transporting Indians to and from health facilities should be determined at the time the question of Indian right to free medical care is settled. As is presently the case, the nurse or doctor should be responsible for determining when a patient requires evacuation.

The facilities and the procedures for the evacuation of patients requiring emergency medical care should be improved.

- . An all-weather landing strip should be provided in Indian communities of the Middle North, where practical.
- . A standby plan for the evacuation of patients at freeze-up and break-up should be developed in communities where it is not practical to build an all-weather air strip. Such a plan would probably be based on the use of helicopters.
- . The branch should ensure that taxi services are available in those areas where evacuation by road is possible. The branch should not own taxis or provide taxi service directly.
- . The feasibility of the band's owning an automobile that could be used for evacuation when required should be examined. Where the band operates a taxi, the band should be reimbursed in the same manner as the operator of a private taxi.

10. STEPS SHOULD BE TAKEN IMMEDIATELY TO IMPROVE
THE TOTAL ENVIRONMENT IN INDIAN COMMUNITIES

Poor environmental conditions have been identified as a primary cause of the present poor health status of the Indian people. It is essential that environmental improvements be made if the health status of the Indian population is to be significantly raised.

The inadequacies in many aspects of the environment in Indian communities could be improved immediately if sufficient effort and resources were committed. For example, the employment in community development projects of able bodied unemployed Indians who are presently on welfare could result in a substantial improvement in environmental conditions in Indian communities.

(1) The Present Sanitation Program for Indian Communities
Should Be Expanded Immediately

All homes should be provided with water disposal pits, toilets, and either garbage pits or a regular system of garbage disposal. Where required, regular garbage collection should be instituted.

All homes should be within reasonable distance of a supply of potable water. Where feasible, the water supply should be chlorinated and fluoridated. A system for providing pure water should be available to every Indian community within three years.

The feasibility of providing communal shower facilities in Indian communities should be investigated. When such facilities are provided, they should be within a reasonable distance of all people. It is likely that more than one facility

will be required in most Indian communities. An adequate number of shower stalls should be provided, perhaps one shower stall for every 30 people.

(2) The Present Housing Program for Indian Communities Should Be Improved

Steps should be taken to provide approximately 3,200 new or renovated homes in the Middle North over the next three years. This estimate is based on the following:

- . Approximately 7,000 homes exist at present in the Middle North.
- . Approximately 40% of the existing homes are inadequate. This estimate was derived from observation of housing conditions in the 39 Indian communities visited in the Middle North.
- . An annual rate of net family formation of 5.75 per 1,000 per year will result in the formation of approximately 750 families over the next three years.
- . One dwelling is needed for every 1.1 families.

Provision of electricity to homes wherever possible would improve living standards and environmental conditions considerably.

A large portion of the need for more homes should be met by renovating existing homes. These renovated homes would serve as a bridge between the relatively primitive dwellings the

Indian families have been living in and the new homes presently being provided, permitting a period of adjustment to improved housing conditions. The Indian people should renovate the homes themselves, with materials provided by the Indian Affairs Branch, where necessary.

Indian families should receive instruction in the proper care of a new home before moving into it and this should continue after they have moved in. The community health worker should provide this education.

(3) Programs Designed To Improve Employment Opportunities for Indians Should Be Increased

Vocational training and adult education programs including basic literacy training are currently under way and should be expanded. The lack of education has limited the employment opportunities available. Generally, Indians with less education have a retarding influence on the educational development of their children.

The vocational skills taught to the Indian people should be relevant to the employment opportunities in the area in which they wish to settle. Intensive counseling and follow-up to vocational training should be provided to secure employment for the Indian people and help them remain employed.

A comprehensive, intensive, and continuing program should be developed to search out employment opportunities for Indians in both the public and private sectors of the economy. The program to assist employers in hiring, training, and retaining Indian employees should be substantially expanded and improved. Employers need to be aware of the different social and cultural background of the Indian people, and the work environment has to be flexible enough to allow the Indian person to adjust over time.

Efforts should be made to develop Indian entrepreneurs and services businesses in Indian communities. Small businesses such as a sawmill, bakery, fuel supply depot, and dressmaking shop would:

- . Bring money into the community from outside sources.
- . Retain money in the Indian community and provide employment for Indian people.

A large number of community projects should be undertaken in Indian communities to improve the environment and to provide employment. Such programs generally should provide employment to unemployed able bodied men. Those who choose not to

work in these projects should not be provided with welfare.

The wage paid for such work should be greater than the individual would receive from welfare; for example, it could be the equivalent of 125% of the welfare payment.

The following are examples of the types of community improvement projects that could be undertaken:

- . Construction of roads
- . Construction of airstrips
- . Construction of garbage pits
- . Construction of wells for water
- . Establishment of water delivery and garbage collection systems
- . Construction of study halls for school children
- . Construction of tourist camps
- . Construction of community recreational centres

(4) The Educational Programs for Indians Should Be Expanded and Improved

The benefits and practicality of teaching an Indian child in his own language for the first two to three years should be investigated. Some educators and psychologists claim that

imposing learning in a foreign language at an early age may have a detrimental effect on the intellectual growth and future educational achievement of the Indian child. Although still a controversial issue, it is believed by some linguists that a child should acquire maturity of expression in his mother tongue before being exposed to a learning situation in a foreign language. This maturity of expression is different for each child, but is usually attained by the time he reaches the age of seven or eight. Conducting the first years of school in his own language might facilitate the child's adjustment to the school environment.

The educational curriculum should be specifically designed to account for individual differences of Indians and to meet their specific needs.

Efforts should be made to involve Indians in both the educational and administrative aspects of the school system by actively encouraging the development of Indians as teachers and teacher-aides and by actively involving them on school boards.

(5) A Comprehensive Recreation Program Should Be Developed and Initiated in Each Indian Community

An active recreation program can serve as a partial substitute for the lack of economic activity presently found on reserves. Activity contributes directly to good health and further serves as a motivation for maintaining health.

Recreational programs should be developed for both adults and children. As first steps in the development of a comprehensive program, an organized competitive sports program and an organized drama program should be implemented. Funds should be made available for the development of recreational facilities such as hockey rinks, baseball diamonds and recreational halls in Indian communities.

Where schools possessing physical education facilities exist in or close to Indian communities, efforts should be made to have these facilities available for after school hours recreation programs. Consideration should be given to the development of libraries in Indian communities, possibly in conjunction with the development of study halls for Indian school children.

Each Indian community should be actively encouraged to take advantage of the recreational grant available to it and appoint a full-time recreational director who would be responsible for developing and maintaining recreational programs in Indian communities.

(6) Steps Should Be Taken To Involve the Provinces Actively in Providing Services to Registered Indians

Provincial governments generally have developed programs and experience required to assist in the economic and social development of Indian communities. If they are ultimately to assume the same responsibility for Indians that they do for other provincial citizens, it is essential that the provinces begin to provide services to the Indian people in the near future. As provincial citizens, the Indians should have the same rights, privileges, and responsibilities held by other provincial citizens, which they presently do not.

Some provinces have recognized their responsibility to the Indian people and have, for example, provided community development workers.

11. IMPLEMENTING THE RECOMMENDED HEALTH DELIVERY SYSTEM WOULD INCREASE BY APPROXIMATELY 20% TO 25% THE AMOUNT PRESENTLY BEING DIRECTLY SPENT FOR INDIAN HEALTH SERVICES IN THE MIDDLE NORTH. ADDITIONAL CAPITAL EXPENDITURES SHOULD BE MADE, WHICH WILL AFFECT OPERATING COSTS

Of the total \$27,300,000 spent on Indian health services in Canada during the 1968-1969 fiscal year, an estimated \$6,500,000 was directly spent in the Middle North. The anticipated 20% to 25% increase in Middle North expenditures results from additional spending of \$1,329,000 to \$1,646,000 in that area. A summary analysis of the increased expenditure is provided in Exhibit XLVII, following this page.

A detailed cost analysis for all the Middle North has not been made, as the data necessary for such analysis do not exist in readily obtainable form. To provide some in-depth understanding of the cost characteristics of the present health delivery system, the northern half of Manitoba, and in particular, the Norway House area, was thoroughly analysed.

In deriving the foregoing estimate of additional expenditures, it was assumed that while a redeployment of administrative resources may be required in some instances, the improved health care delivery system can be realized without increased cost for such operations as the head office and regional administration. Such an assumption appears to be justified by the analysis.

EXHIBIT XLVII
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
ESTIMATED COST OF IMPLEMENTING THE
RECOMMENDED HEALTH CARE DELIVERY SYSTEM
IN THE MIDDLE NORTH

<u>Category of Cost</u>	<u>Additional Expenditures Arising From</u>		<u>Estimated Total Increase in Expenditures</u>
	<u>Additional Staff (at increased salaries)</u>	<u>Increased Salaries for Existing Staff</u>	
Nursing Personnel	\$ 434,000-\$ 496,000	\$63,000-\$105,000	\$ 497,000-\$ 601,000
Community Health Workers	283,000- 367,000	- -	283,000- 367,000
Dental Services	216,000- 243,000	9,000- 15,000	225,000- 258,000
Ophthalmologic and Optometric Services	54,000- 66,000	- -	54,000- 66,000
Physician Services	91,000- 112,000	5,000- 6,000	96,000- 118,000
Community Aides	<u>15,000- 34,000</u>	<u>5,000- 7,000</u>	<u>20,000- 41,000</u>
Total Increase in Personnel Costs	<u>\$1,093,000-\$1,318,000</u>	<u>\$82,000-\$133,000</u>	<u>\$1,175,000-\$1,451,000</u>
Orientation Program Costs			\$ 18,000-\$ 24,000
Increased Travel Costs			<u>136,000- 171,000</u>
			<u>\$1,329,000-\$1,646,000</u>
Estimated Maximum Capital Expenditure			\$2,200,000-\$2,950,000
Estimated Increased Operating Expenditure Arising from Additional Capital Expenditures			\$ 200,000-\$ 300,000

The estimated cost of implementing the recommendations for an improved health care delivery system does not reflect cost reductions that may result as improvements in the system are brought about. Such cost reductions may be realized as need for patient travel and for prevention of certain major and costly medical conditions among Indian patients decreases.

The essentially unquantifiable nature of the benefits of improved health care contributed further to the impossibility of making a detailed cost-benefit analysis for the increased expenditures on Indian health care services. For example, it has not been possible to measure the extent to which an improved health delivery system might improve Indian health, thereby improving educational performance and employment opportunities, thereby decreasing the need for welfare.

(1) Additional Manpower Expenditures Account for
Approximately 85% to 90% of the Total Increase in
Expenditures

It is estimated that an increased expenditure of approximately \$1,175,000 to \$1,451,000 for manpower will be needed to meet the personnel requirements specified earlier in this chapter. The large increase in expenditures on manpower reflects the fact that more and better qualified personnel is

the basic resource needed to improve the health care delivery system. Estimates of staffing requirements were based on a registered Indian population of 42,500 in the Middle North. The estimate for each category of personnel includes salary and other related costs.

(1.1) An Expenditure Increase of Approximately \$497,000 to \$601,000 Will Be Required for Field Nursing Personnel Outside of Hospitals

This estimate is based on the following staffing patterns:

- . One public health nurse for every 700 population in the Middle North.
- . One treatment nurse for every 1,000 population in the Middle North.

Such a staffing pattern would require 61 public health nurses and 43 treatment nurses and on the basis of an average cost of \$7,000 to \$8,000 per nurse per year, staffing would require the annual expenditure of \$728,000 to \$832,000.

At present, 42 nurses are employed in the Middle North at an approximate average cost of \$5,500 per nurse per year. Costs of increasing the salaries of present nurses and of hiring additional nurses to fill the remaining positions will result in an estimated increased expenditure for nursing personnel of approximately \$497,000 to \$601,000.

(1.2) An Expenditure Increase of Approximately \$283,000 to \$367,000 Will Be Required for Community Health Workers

This estimate is based on the employment of 85 community health workers in the Middle North. This is equivalent to one community health worker for every 500 population. On the basis of an average cost of \$4,500 to \$5,500 per year per worker, an annual expenditure of approximately \$383,000 to \$467,000 will be required.

At present, 20 community health workers are employed in the Middle North at an approximate cost of \$5,000 per worker per year. The increased expenditure for community health workers is, therefore, approximately \$283,000 to \$367,000.

(1.3) An Expenditure Increase of Approximately \$225,000 to \$258,000 Will Be Required for Dental Services

The recommendation that each community receive the services of one dentist for six full days per year for every 100 population is the basis of this estimate. It is assumed that an additional 30% of the dentists's time will be required for travelling and for setting up and packing dental equipment. On this basis, approximately 3,315 days of dentist time will be required. On the basis of an average cost per day of \$80 to \$90, an annual expenditure of approximately \$265,000 to \$298,000 will be required.

At present, approximately \$40,000 is being expended for dental services in the Middle North. This indicates that an additional expenditure of approximately \$225,000 to \$258,000 will have to be made for such services.

(1.4) An Expenditure Increase of Approximately \$54,000 to \$66,000 Will Be Required for Ophthalmologists and Optometrists

It is estimated that approximately 500 full days of ophthalmologists' or optometrists' time will be required each year to allow the population to be examined, on the average, once every three to four years.

It is assumed that an additional 20% of the doctor's time will be required for travelling and for setting up and packing equipment. Therefore, approximately 600 days of ophthalmologist or optometrist time will be required. On the basis of an average cost per day of \$90 to \$110, an annual expenditure of approximately \$54,000 to \$66,000 will be required.

(1.5) An Expenditure Increase of Approximately \$96,000 to \$118,000 Will Be Required for Physician Services

It was recommended that one full day a month of a physician's time be available for every 120 population in the

Middle North. It is assumed that an additional 30% of the physician's time will be required for travelling. On this basis, approximately 5,530 days of physician time will be required. With an average cost of \$90 to \$110 per day, an annual expenditure of approximately \$498,000 to \$608,000 will be required for physician services.

It is estimated that, at present, 250 days of physician time are being provided in the Middle North for community visits, at an average cost of \$70 a day. Therefore, an additional expenditure of approximately \$480,000 to \$590,000 will be required each year. It is assumed that 80% to 90% of this cost will be recovered under medicare insurance, so that the net additional annual expenditure would be approximately \$96,000 to \$118,000.

(1.6) An Expenditure Increase of Approximately \$20,000 to \$41,000 Will Be Required for Community Aides

From observations of Indian communities in the Middle North, it is estimated that 20 to 25 community aides are required. On the basis of an average cost of \$1,200 to \$1,800 per year for each community aide, a maximum total expenditure of approximately \$24,000 to \$45,000 will be required.

At present, approximately \$4,000 is being paid to all community aides and lay dispensers in the Middle North, indicating that an increase in expenditure of approximately \$20,000 to \$41,000 per year will be required.

(2) An Expenditure Increase of Approximately \$136,000 to \$171,000 for Travel Will Be Necessary

Increased travel expenditures will be necessary to implement the recommendations related to the health care delivery system and to facilitate improved co-ordination and control within the Medical Services Branch.

To estimate travel requirements in the Middle North, a hypothetical health delivery system based on the recommendations set forth in this chapter was developed for 24 communities in northern Manitoba and the travel requirements for such a system were determined. From this analysis, it was found that:

- . The 24 communities required 461 physician visits and 288 separate nurse visits per year. This is equivalent to 19.2 physician visits and 12 nurse visits for each community each year.
- . The average resident population of the 24 communities was approximately 625.
- . The average round trip for each community visit was 170 miles.

These findings were generalized to determine the number of visits by physicians and nurses that were required in the Middle North. It was assumed that there would be 31.2 community visits each year for every 650 population. It was projected that a total of 2,040 community visits would be made in the Middle North each year. Assuming that the average round trip distance to each community is 170 miles and that the average cost per mile is \$.50 to \$.60, the average trip cost is \$85 to \$102.

On this basis, a total expenditure of approximately \$173,000 to \$208,000 will be required for community visits by health personnel. It is estimated that approximately \$95,000 is presently being spent annually in the Middle North for travel and that approximately 60% of this travel is for community visits by health personnel. This would suggest that an additional expenditure of \$116,000 to \$151,000 will be required for community visits by health personnel.

To facilitate improved field staff supervision and more frequent contact between nursing personnel and physicians, an additional expenditure equivalent to approximately 20% of the present expenditures in the Middle North is required - approximately \$20,000.

- (3) An Annual Expenditure of Approximately \$18,000 to \$24,000 Should Be Made for the Orientation of Personnel

Estimates of expenditures in this category are based on the assumption that the orientation program would be held four times a year, with an average of 15 people attending, and that each orientation program would last ten days. If the average cost per person per day is \$30 to \$40, the orientation program will cost approximately \$18,000 to \$24,000 each year.

- (4) The Proposed Health Delivery System Is Likely To Require Additional Physical Facilities

Several additional nursing stations and health stations will probably be required, as well as improved communication facilities and landing strips for airplanes. The exact number and type of facilities required will have to be determined after careful analysis, using as a basis the criteria presented in this chapter.

The maximum capital expenditure that would be incurred ranges between \$2,200,000 and \$2,950,000. This estimate includes:

10 portable nursing stations at an average cost of \$100,000 to \$120,000.

- . 20 health stations at an average cost of \$20,000 to \$30,000.
- . 20 landing strips at an average cost of \$10,000 to \$20,000.
- . Improved communication facilities costing approximately \$600,000 to \$750,000 in total.

Each additional nursing station would probably increase the annual operating budget by approximately \$20,000 to \$30,000.

* * * * *

The need to improve Indian health services has been demonstrated and recognized. The recommendations presented in this chapter will result in an improved health services program that will more effectively meet the needs of the Indian people. The large number of recommendations and the complex nature of the problems they are designed to correct make it necessary to develop a careful strategy for implementation. This strategy is presented in the plan of action included in Chapter V.

V. PLAN OF ACTION

V. PLAN OF ACTION

This chapter presents a plan of action that will facilitate the orderly and consistent review, evaluation, and implementation of recommendations for the improvement of Indian health services. The plan of action will help to provide direction and continuity to the deliberations of decision-making groups interested in Indian health in Canada. Equally as important, it will serve as a document against which the progress being made in the implementation of the recommendations can be reviewed and evaluated.

1. BEFORE THE RECOMMENDATIONS ARE IMPLEMENTED, THEY SHOULD BE CAREFULLY REVIEWED, EVALUATED, AND ADOPTED BY ALL APPROPRIATE PEOPLE

The recommendations are far-reaching and their implementation will have significant impact on the Medical Services Branch operations and, more generally, on the entire approach to improving the conditions of Indian people. Consequently, it is important that the recommendations receive the proper focus and attention, particularly within the Medical Services Branch.

The successful implementation of the recommendations will require a receptive and positive environment. Emphasis should be

placed on developing positive approaches to the implementation of the recommendations.

- (1) Responsibility for Ensuring That the Recommendations Are Reviewed, Evaluated, Adopted, and Implemented by the Appropriate People Should Initially Be Assigned to One Individual in the Minister's Office

Because of the complexity of the problems, the inter-relationships with other agencies, and the significant departure from traditional approaches, the successful implementation of the recommendations will require the dynamic leadership and the active and continuous support of the Minister of National Health and Welfare and the Minister's office.

Executive direction should be provided to establish priorities for the review, evaluation, and implementation of recommendations. This direction should ensure that the recommendations are fully and thoughtfully considered and that the activities related to them are fully co-ordinated.

It is essential that full communication, co-operation and agreement be established between the individual providing this

leadership and top management levels of the Medical Services Branch.

As recommendations are adopted and implemented, this function and the related responsibilities can be transferred to Medical Services Branch personnel. In some cases, it may be more appropriate that certain of these responsibilities be transferred to the central agency recommended in the report.

(2) The Medical Services Branch Staff Should Be in Agreement with the Policy and Direction Provided by the Minister's Office

There appears to have been a change in emphasis in the direction of the Indian health services program. Until recently, it had been the apparent policy of the Medical Services Branch staff to gradually phase responsibility for Indian health services out of the branch and into the provinces. Recent actions by the Minister appear to have changed the emphasis of this policy to one of phasing out Federal health services in the southern areas of the provinces and dedicating the resources saved to improved federal services in the northern areas. It is possible that not all key branch personnel have been consulted on this change in policy emphasis. If

they were, full agreement on the issue was not reached. In some cases, this lack of consultation has injured staff morale.

Since the proposed Indian health program can be effective only if the Medical Services Branch staff and the Ministry actively subscribe to the same philosophy, the Minister should take steps to obtain the active support of branch personnel for his policies.

- (3) Because of the Complexity of the Problems Involved, the Successful Implementation of the Recommendations Will Require a Progressive and Capable Management Within the Medical Services Branch, Especially at Top Levels

It is desirable to have medical professionals in many of the top management levels of the Medical Services Branch. Equally important, however, these professionals should possess management acumen. It is important that Medical Services Branch personnel at top levels provide leadership and guidance in solving the health problems of the Indians.

2. VARIOUS GOVERNMENT AND NONGOVERNMENT AGENCIES SHOULD BE INVOLVED IN THE IMPLEMENTATION OF THE RECOMMENDATIONS OF THE REPORT

It was recommended in Chapter IV that in the near future a pluralistic approach involving many government and nongovernment

groups be used in efforts to improve the health services provided to Indians. In the long run, the provinces and the Indians themselves should assume the responsibility for providing health services to Indians.

Successful implementation of the recommendations will require that the various groups be involved, as appropriate. A logical organization and delegation of responsibility and authority to the various groups will be necessary to ensure that they can make the appropriate decisions for the implementation of the recommendations.

The recommendations that have been presented in the report are all of high priority. In most cases, they are independent of one another and it would be possible to implement most of the recommendations simultaneously. An important exception is that an effective attack on Indian problems will require a co-ordinated approach which can only be achieved through the early establishment of the recommended central agency. Exhibit XLVIII, following this page, lists the recommended actions that are to be taken for the improvement of Indian health services. The exhibit also indicates:

- Where the recommendation is discussed in the report
- By whom action should be taken
- When actions should be taken

EXHIBIT XLVIII (1)
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
PLAN OF ACTION

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Establish a central body to provide leadership and co-ordination in bettering all aspects of Indian life	4 (2)	Federal Government Federal Parliament	I*	1971
2. Take steps to improve the total environment in Indian communities	10	Indian Affairs Branch Federal Parliament Regional Economic Development Agencies	1970	Continuously
3. Take steps to involve the provinces in providing services to registered Indians	3 (6) 10 (6)	Federal Government Federal Parliament Various Federal Government Agencies	1970	1972 and continuously thereafter
4. Establish a clear statement of policy and objectives for the provision of health services to Indians	7 (3)	Head Office Minister's Office	I	1970
5. Establish health facility regions	9 (1)	Head Office Regional Offices	I	1970
5.1 Determine health facilities requirements in each Indian community	9	Regional Offices Head Office	I	1970
5.2 Provide the health facilities required in Indian communities	9	Head Office Regional Offices	1970	1974
6. Determine manpower requirements for regular physician visits in isolated communities	6 (2.4)	Regional Offices Head Office	I	1970
6.1 Provide required manpower for regular physician visits in isolated communities	6 (2.4) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I	1972

* I - Immediately

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
6.2 Establish necessary additional agreements with universities and professional associations to provide medical care to Indians	8 (1.1)	Head Office Regional Offices	I*	1971
6.3 Improve efforts to recruit doctors	8 (1.2) 8 (2)	Head Office Regional Offices	1970	1972 and continuously thereafter as required
7. Determine manpower requirements for regular visits by dentists	6 (2.5)	Regional Offices Head Office	I	1970
7.1 Provide required manpower for regular visits by dentists	6 (2.5) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I	1972
7.2 Establish agreements with professional dental associations for providing dental care services to Indians	8 (1.1)	Head Office Regional Offices	I	1971
7.3 Improve efforts to recruit dentists	8 (1.2) 8 (2)	Head Office Regional Offices	1970	1972
8. Determine manpower requirements for regular visits by ophthalmologists or optometrists	6 (2.6)	Regional Offices Head Office	I	1970
8.1 Provide required manpower for rendering eye care to Indians by establishing agreements with ophthalmological and optometrical associations	6 (2.6) 8 (1.1)	Head Office Regional Offices	1970	1972
9. Develop a system for monitoring services provided under agreements with universities and professional associations	8 (1.1)	Head Office	1970	1971
10. Determine number of public health nurses required	6 (1.4)	Regional Offices Head Office	I	1970
10.1 Determine number of treatment nurses required	6 (2.3)	Regional Offices Head Office	I	1970

*I - Immediately

Recommendation		Section of Chapter IV	Responsibility	Action to	
				Begin	Be Completed
10.2	Provide the required number of public health and treatment nurses	6 (1.4) 6 (2.3) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I*	1971
10.3	Improve efforts to recruit nurses	8 (1.2) 8 (2)	Head Office Regional Offices	I	1971 and continuously thereafter as required
10.4	Investigate the feasibility of entering into agreements with nursing schools	8 (1.1)	Head Office	1970	1971
11.	Review compensation schedules and make adjustments where necessary	8 (2)	Head Office Minister's Office	I	1971
12.	Improve the image of providing health services to Indians	8 (1.2)	Head Office Minister's Office Regional Offices	1970	1971 and continuously thereafter as required
13.	Determine the number of community health workers and community aides required	6 (1.4) 6 (2.2)	Regional Offices Head Office	I	1970
13.1	Increase the number of community health workers and community aides to meet required numbers	8 (4)	Regional Offices Head Office	1970	1972
14.	Settle the questions related to Indian treaty rights	2 (2)	Federal Government Indian Leaders Federal Parliament	1970	1973
15.	Consult with the provincial governments and the Indian people in regard to the transfer of responsibility for Indian health services to the provinces and the Indian people	3 (4) 3 (6)	Minister's Office Head Office Regional Offices	1970	1979
16.	Increase the amount of health education provided in Indian communities	6 (1.1) 6 (1.2) 6 (1.3)	Regional Offices Head Office	1970	1971
16.1	Have personal hygiene habits practised at school	6 (1.3)	Regional Offices	1970	1971

* I - Immediately

	Recommendation	Section of Chapter IV	Responsibility	Action to	
				Begin	Be Completed
16.2	Develop and implement a health curriculum for schools	6 (1.3)	Head Office** Regional Offices**	1970	1971
17.	Develop a planning process and information system that provides medical and financial information for management decisions	7 (3)	Head Office Regional Offices	1970	1972
18.	Develop a clear statement of objectives for subprograms	7 (3)	Regional Offices Head Office	I*	1970
19.	Improve communication, personal contact, and supervision within the Medical Services Branch	7 (4)	Head Office Regional Offices	I	1970
20.	Delineate clearly the nurse's responsibility for the community health worker and the community aide, and inform the community health worker, the community aide, and the Indian people of this responsibility	5 (2) 6 (2.2)	Head Office Regional Offices	1970	1971
21.	Develop and implement a comprehensive cultural orientation program for health professionals and non-Indian health personnel	8 (3)	Head Office Regional Offices	1970	1971
22.	Develop and implement a program to train nurses in skills needed to meet basic medical needs of Indians living in isolated areas	8 (3)	Head Office Regional Offices (with universities)	1970	1971
23.	Develop and implement refresher courses for native health personnel	8 (4)	Head Office Regional Offices	1970	1972
24.	Increase the opportunities for continuing education for professional health personnel	8 (1.2)	Head Office	1970	1971
25.	Develop an improved communication system in the Middle North	9 (4) 6 (2.2) 9 (1)	Head Office	1970	1973
26.	Develop an emergency evacuation plan for communities that are isolated at freeze-up and break-up times	9 (5)	Regional Offices	I	1970

* I - Immediately

** Responsibility may be limited to ensuring that provincial departments of education develop appropriate curricula through consultation with the Medical Services Branch

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
27. Plan and implement the community development approach to improve Indian health services	5 (1.2)	Head Office Regional Offices Minister's Office	I*	1973 and continuously thereafter
27.1 Establish health committees in Indian communities	5 (2)	Regional Offices Head Office	1970	1974
27.2 Place the community health worker under the direction of the Indian health committee	5 (2)	Regional Offices Head Office	1972	1975 (preparation for assumption of this responsibility should begin immediately)
28. Develop and implement a well-documented medical information system, especially in areas where there is a frequent rotation of medical personnel	8 (1.1) 7 (3)	Head Office Regional Offices	1970	1971
29. Improve the procedures for monitoring and communicating information on a patient's progress	6 (2.7)	Regional Offices	1970	1972
30. Improve the hostel system for boarding patients prior to admission to hospital and after discharge	9 (2)	Regional Offices	1970	1972
31. Investigate the feasibility of providing convalescent and custodial facilities in Indian communities	9 (3)	Head Office	1971	1972
32. Withdraw services to the extent possible where conventional medical resources exist	6 (2.1) 3 (4)	Head Office Regional Offices	I	Continuously
33. Formally transfer Medical Services Branch manpower and other resources to the provinces or the Indian people	3 (4)	Federal Government Federal Parliament Head Office	1976	1980
34. Decentralize the Medical Services Branch organization	7 (2) 3 (6)	Head Office Regional Offices Minister's Office	1970	1975

*I - Immediately

3. PRIMARY RESPONSIBILITY FOR PROVIDING DIRECTION
AND ENSURING EXECUTION DURING THE REVIEW,
DISPOSITION, AND IMPLEMENTATION OF EACH RECOM-
MENDATION SHOULD BE SPECIFICALLY AND CLEARLY
ASSIGNED TO THE APPROPRIATE GROUP

The recommended actions for improving the health status of the Indians are of high priority and often involve several groups. To prevent the delays that can result from unclear definition of authority and responsibility when several groups are involved, one group should be given primary responsibility for providing direction and ensuring execution during the review, disposition, and implementation of each recommendation. This group should be held fully accountable for the results.

Exhibit XLIX, following this page, provides a listing of recommendations arranged by responsible group. The recommendations for which the group has primary responsibility have been listed on the basis of priority, with the highest priority items appearing first. The other recommended actions in which each group will also have to be involved are listed separately.

This exhibit should provide the various groups with a meaningful and useful guide for actions to improve conditions among the Indian people. In particular, it will facilitate the logical and effective

EXHIBIT XLIX (1)
DEPARTMENT OF NATIONAL HEALTH AND WELFARE
**ARRANGEMENT OF PLAN OF ACTION BY GROUP
ASSIGNMENTS OF PRIMARY RESPONSIBILITY
FOR EXECUTION**

PRIMARY RESPONSIBILITIES OF THE FEDERAL GOVERNMENT

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Create a central body to provide leadership and co-ordination in bettering all aspects of Indian life	4 (2)	Federal Government Federal Parliament	I*	1971
2. Take steps to involve the provinces in providing services to registered Indians	3 (6) 10 (6)	Federal Government Federal Parliament Various Federal Government Agencies	1970	1972 and continuously thereafter
3. Settle the questions related to Indian treaty rights	2 (2)	Federal Government Indian Leaders Federal Parliament	1970	1973
4. Formally transfer Medical Services Branch manpower and other resources to the provinces or the Indian people	3 (4)	Federal Government Federal Parliament Head Office	1976	1980

OTHER RESPONSIBILITIES OF FEDERAL GOVERNMENT

None

* I - Immediately

PRIMARY RESPONSIBILITIES OF THE FEDERAL PARLIAMENT

None

OTHER RESPONSIBILITIES OF THE FEDERAL PARLIAMENT

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Create a central body to provide leadership and co-ordination in bettering all aspects of Indian life	4 (2)	Federal Government Federal Parliament	I*	1971
2. Take steps to improve the total environment in Indian communities	10	Indian Affairs Branch Federal Parliament Regional Economic Development Agencies	1970	continuous
3. Take steps to involve the provinces in providing services to registered Indians	3 (6) 10 (6)	Federal Government Federal Parliament Various Federal Government Agencies	1970	1972 and continuously thereafter
4. Settle the questions related to Indian treaty rights	2 (2)	Federal Government Indian Leaders Federal Parliament	1970	1973
5. Formally transfer Medical Services Branch manpower and other resources to the provinces and the Indian people	3 (4)	Federal Government Federal Parliament Head Office	1976	1980

* I - Immediately

PRIMARY RESPONSIBILITIES OF THE MINISTER'S OFFICE

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Consult with the provincial governments and the Indian people in regard to the transfer of the responsibility for Indian health services to the provinces and the Indian people	3 (4) 3 (6)	Minister's Office Head Office Regional Offices	1970	1979

OTHER RESPONSIBILITIES OF THE MINISTER'S OFFICE

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Establish a clear statement of policy and objectives for the provision of health services to Indians	7 (3)	Head Office Minister's Office	I*	1970
2. Review compensation schedules and make adjustments where necessary	8 (2)	Head Office Minister's Office	I	1971
3. Improve the image of providing health services to Indians	8 (1.2)	Head Office Minister's Office Regional Offices	1970	1971 and continuously thereafter as needed
4. Plan and implement the community development approach to improve Indian health services	5 (1.2)	Head Office Regional Office Minister's Office	I	1973 and continuously thereafter
5. Decentralize the Medical Services Branch organization	7 (2) 3 (6)	Head Office Regional Offices Minister's Office	1970	1975

*I - Immediately

PRIMARY RESPONSIBILITIES OF THE INDIAN AFFAIRS BRANCH

<u>Recommendation</u>	<u>Section of Chapter IV</u>	<u>Responsibility</u>	<u>Action to</u>	
			<u>Begin</u>	<u>Be Completed</u>
1. Take steps to improve the total environment in Indian communities	10	Indian Affairs Branch Federal Parliament Regional Economic Development Agencies	1970	Continuously

OTHER RESPONSIBILITIES OF INDIAN AFFAIRS BRANCH

None

PRIMARY RESPONSIBILITIES OF THE HEAD OFFICE

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Establish a clear statement of policy and objectives for the provision of health services to Indians	1 7 (3)	Head Office Minister's Office	I*	1970
2. Establish health facility regions	9 (1)	Head Office Regional Offices	I	1970
3. Provide the health facilities required in Indian communities	9	Head Office Regional Offices	1970	1974
4. Provide required manpower for regular physician visits in isolated communities	6 (2.4) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I	1972
5. Establish necessary additional agreements with universities and professional associations to provide medical care to Indians	8 (1.1)	Head Office Regional Offices	I	1971
6. Improve efforts to recruit doctors	8 (1.2) 8 (2)	Head Office Regional Offices	1970	1972 and continuously thereafter as required
7. Provide required manpower for regular visits by dentists	6 (2.5) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I	1972
8. Establish agreements with professional dental associations for providing dental care services to Indians	8 (1.1)	Head Office Regional Offices	I	1971
9. Improve efforts to recruit dentists	8 (1.2) 8 (2)	Head Office Regional Offices	1970	1972
10. Provide manpower requirements for rendering eye care to Indians by establishing agreements with ophthalmological and optometrical associations	6 (2.6) 8 (1.1)	Head Office Regional Offices	1970	1972

* I - Immediately

PRIMARY RESPONSIBILITIES OF THE HEAD OFFICE (Continued)

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
11. Develop a system for monitoring services provided under agreements with universities and professional associations	8 (1.1)	Head Office	1970	1971
12. Provide the required number of public health and treatment nurses	6 (1.4) 6 (2.3) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I*	1971
13. Improve efforts to recruit nurses	8 (1.2) 8 (2)	Head Office Regional Offices	I	1971 and continuously thereafter as required
14. Investigate the feasibility of agreements entering into nursing schools	8 (1.1)	Head Office	1970	1971
15. Review compensation schedules and make adjustments where necessary	8 (2)	Head Office Minister's Office	I	1971
16. Improve the image of providing health services to Indians	8 (1.2)	Head Office Minister's Office Regional Offices	1970	1971 and continuously thereafter as required
17. Consult with the provincial government and the Indian people in regard to the transfer of the responsibility for Indian health services to the provinces and the Indian people	3 (4) 3 (6)	Head Office Minister's Office Regional Offices	1970	1979
18. Develop and implement a health curriculum for schools	6 (1.3)	Head Office** Regional Offices**	1970	1971
19. Develop a planning process and information system that provides medical and financial information for management decisions	7 (3)	Head Office Regional Offices	1970	1972
20. Improve communication, personal contact, and supervision within the Medical Services Branch	7 (4)	Head Office Regional Offices	I	1970

* I - Immediately

** Responsibility may be limited to ensuring that provincial departments of education develop appropriate curricula through consultation with the Medical Services Branch

PRIMARY RESPONSIBILITIES OF THE HEAD OFFICE (Continued)

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
21. Delineate clearly the nurse's responsibility for the community health worker and the community aide, and inform the community health worker, the community aide, and the Indian people of this responsibility	5 (2) 6 (2.2)	Head Office Regional Offices	1970	1971
22. Develop and implement a comprehensive cultural orientation program for health professionals and non-Indian health personnel	8 (3)	Head Office Regional Offices	1970	1971
23. Develop and implement a program to train nurses in skills needed to meet basic medical needs of Indians living in isolated areas	8 (3)	Head Office Regional Offices (with universities)	1970	1971
24. Develop and implement refresher courses for native health personnel	8 (4)	Head Office Regional Offices	1970	1972
25. Increase the opportunities for continuing education for professional health personnel	8 (1.2)	Head Office	1970	1971
26. Develop an improved communication system in the Middle North	9 (4) 6 (2.2) 9 (1)	Head Office	1970	1973
27. Plan and implement the community development approach to improve Indian health services	5 (1.2)	Head Office Regional Offices Minister's Office	I*	1973 and continuously
28. Develop and implement a well-documented medical information system, especially in areas where there is a frequent rotation of medical personnel	8 (1.1)	Head Office Regional Offices	1970	1971
29. Investigate the feasibility of providing convalescent and custodial facilities in Indian communities	9 (3)	Head Office	1971	1972

*I - Immediately

PRIMARY RESPONSIBILITIES OF THE HEAD OFFICE (Continued)

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
30. Withdraw services to the extent possible where conventional medical resources exist	6 (2.1) 3 (4)	Head Office Regional Offices	I*	Continuously
31. Decentralize the Medical Services Branch organization	7 (2) 3 (6)	Head Office Regional Offices Minister's Office	1970	1975

OTHER RESPONSIBILITIES OF THE HEAD OFFICE

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Determine health facilities requirements in each Indian community	9	Regional Offices Head Office	I*	1970
2. Determine manpower requirements for regular physician visits in isolated communities	6 (2.4)	Regional Offices Head Office	I	1970
3. Determine manpower requirements for regular visits by dentists	6 (2.5)	Regional Offices Head Office	I	1970
4. Determine manpower requirements for regular visits by ophthalmologists or optometrists	6 (2.6)	Regional Offices Head Office	I	1970
5. Determine number of public health nurses required	6 (1.4)	Regional Offices Head Office	I	1970
6. Determine number of treatment nurses required	6 (2.3)	Regional Offices Head Office	I	1970
7. Determine the number of community health workers and community aides required	6 (1.4) 6 (2.2)	Regional Offices Head Office	I	1970
8. Increase the number of community health workers and community aides to meet required numbers	8 (4)	Regional Offices Head Office	1970	1972

* I - Immediately

OTHER RESPONSIBILITIES OF THE HEAD OFFICE (Continued)

<u>Recommendation</u>	<u>Section of Chapter IV</u>	<u>Responsibility</u>	<u>Action to</u>	
			<u>Begin</u>	<u>Be Completed</u>
9. Increase the amount of health education provided in Indian communities	6 (1.1) 6 (1.2) 6 (1.3)	Regional Offices Head Office	1970	1971
10. Develop a clear statement of objectives for subprograms	7 (3)	Regional Offices Head Office	I*	1970
11. Establish health committees in Indian communities	5 (2)	Regional Offices Head Office	1970	1974
12. Place the community health worker under the direction of the Indian health committee	5 (2)	Regional Offices Head Office	1972	1975 (preparation for assumption of this responsibility should begin immediately)
13. Formally transfer Medical Services Branch manpower and other resources to the provinces and the Indian people	3 (4)	Federal Government Federal Parliament Head Office	1976	1980

*I - Immediately

PRIMARY RESPONSIBILITIES OF THE REGIONAL OFFICES

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Determine health facilities requirements in each Indian community	9	Regional Offices Head Office	I*	1970
2. Determine manpower requirements for regular physician visits in isolated communities	6 (2.4)	Regional Offices Head Office	I	1970
3. Determine manpower requirements for regular visits by dentists	6 (2.5)	Regional Offices Head Office	I	1970
4. Determine manpower requirements for regular visits by ophthalmologists or optometrists	6 (2.6)	Regional Offices Head Office	I	1970
5. Determine number of public health nurses required	6 (1.4)	Regional Offices Head Office	I	1970
6. Determine number of treatment nurses required	6 (2.3)	Regional Offices Head Office	I	1970
7. Determine the number of community health workers and community aides required	6 (1.4) 6 (2.2)	Regional Offices Head Office	I	1970
8. Increase the number of community health workers and community aides to meet required numbers	8 (4)	Regional Offices Head Office	1970	1972
9. Increase the amount of health education provided in Indian communities	6 (1.1) 6 (1.2) 6 (1.3)	Regional Offices Head Office	1970	1971
10. Have personal hygiene habits practised at school	6 (1.3)	Regional Offices	1970	1971
11. Develop a clear statement of objectives for subprograms	7 (3)	Regional Offices Head Office	I	1970
12. Develop an emergency evacuation plan for communities that are isolated at freeze-up and break-up times	9 (5)	Regional Offices	I	1970

* I - Immediately

PRIMARY RESPONSIBILITIES OF THE REGIONAL OFFICES (Continued)

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
13. Establish health committees in Indian communities	5 (2)	Regional Offices Head Office	1970	1974
14. Place the community health worker under the direction of the Indian health committee	5 (2)	Regional Offices Head Office	1972	1975 (preparation for assumption of this responsibility should begin immediately)
15. Improve the procedures for monitoring and communicating information on a patient's progress	6 (2, 7)	Regional Offices	1970	1972
16. Improve the hostel system for boarding patients prior to admission to hospital and after discharge	9 (2)	Regional Offices	1970	1972

OTHER RESPONSIBILITIES OF THE REGIONAL OFFICES

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
1. Establish health facility regions	9 (1)	Head Office Regional Offices	I*	1970
2. Provide the health facilities required in Indian communities	9	Head Office Regional Offices	1970	1974
3. Provide required manpower for regular physician visits in isolated communities	6 (2, 4) 8 (1, 1) 8 (1, 2)	Head Office Regional Offices	I	1972
4. Establish necessary additional agreements with universities and professional associations to provide medical care to Indians	8 (1, 1)	Head Office Regional Offices	I	1971
5. Improve efforts to recruit doctors	8 (1, 2) 8 (2)	Head Office Regional Offices	1970	1972 and continuously thereafter as required

*I - Immediately

OTHER RESPONSIBILITIES OF THE REGIONAL OFFICES (Continued)

Recommendation	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
6. Provide required manpower for regular visits by dentists	6 (2.5) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I*	1972
7. Establish agreements with professional dental associations for providing dental care services to Indians	8 (1.1)	Head Office Regional Offices	I	1971
8. Improve efforts to recruit dentists	8 (1.2) 8 (2)	Head Office Regional Offices	1970	1972
9. Provide required manpower for rendering eye care to Indians by establishing agreements with ophthalmological and optometrical associations	6 (2.6) 8 (1.1)	Head Office Regional Offices	1970	1972
10. Provide the required number of public health and treatment nurses	6 (1.4) 6 (2.3) 8 (1.1) 8 (1.2)	Head Office Regional Offices	I	1971
11. Improve efforts to recruit nurses	8 (1.2) 8 (2)	Head Office Regional Offices	I	1971 and continuously thereafter as required
12. Improve the image of providing health services to Indians	8 (1.2)	Head Office Minister's Office Regional Offices	1970	1971 and continuously thereafter as required
13. Consult with the provincial governments and the Indian people in regard to the transfer of the responsibility for Indians to the provinces and the Indian people	3 (4) 3 (6)	Minister's Office Head Office Regional Offices	1970	1979
14. Develop and implement a health curriculum for schools	6 (1.3)	Head Office** Regional Offices**	1970	1971

* I - Immediately

** Responsibility may be limited to ensuring that provincial departments of education develop appropriate curricula through consultation with the Medical Services Branch

OTHER RESPONSIBILITIES OF THE REGIONAL OFFICES (Continued)

Recommendation.	Section of Chapter IV	Responsibility	Action to	
			Begin	Be Completed
15. Develop a planning process and information system that provides medical and financial information for management decisions	7 (3)	Head Office Regional Offices	1970	1972
16. Improve communication, personal contact, and supervision within the Medical Services Branch	7 (4)	Head Office Regional Offices	I*	1970
17. Delineate clearly the nurse's responsibility for the community health worker and the community aide, and inform the community health worker, the community aide, and the Indian people of this responsibility	5 (2) 6 (2.2)	Head Office Regional Offices	1970	1971
18. Develop and implement a comprehensive cultural orientation program for health professionals and non-Indian health personnel	8 (3)	Head Office Regional Offices	1970	1971
19. Develop and implement a program to train nurses in skills needed to meet basic medical needs of Indians living in isolated areas	8 (3)	Head Office Regional Offices (with universities)	1970	1971
20. Develop and implement refresher courses for native health personnel	8 (4)	Head Office Regional Offices	1970	1972
21. Plan and implement the community development approach to improve Indian health services	5 (1.2)	Head Office Regional Offices Minister's Office	I	1973 and continuously thereafter
22. Develop and implement a well-documented medical information system, especially in areas where there is frequent rotation of medical personnel	8 (1.1)	Head Office Regional Offices	1970	1971
23. Withdraw services to the extent possible where conventional medical resources exist	6 (2.1) 3 (4)	Head Office Regional Offices	I	Continuously
24. Decentralize the Medical Services Branch organization	7 (2) 3 (6)	Head Office Regional Offices Minister's Office	1970	1975

*I - Immediately

development of an improved health system for Indians and the ultimate transfer of the responsibility for Indian health care to the provinces and conventional health resources.

The exhibit should be used by the appropriate authorities as a checklist to ensure that each group has fulfilled its responsibilities for reviewing and implementing its assigned recommendations.

The entire plan of action should be revised and updated periodically to ensure continued progress towards the achievement of the objective of improved Indian health.

APPENDICES

APPENDIX A

Documents Utilized and Interviews Conducted During the Study

DOCUMENTS UTILIZED AND INTERVIEWS CONDUCTED DURING THE STUDY

To develop sound judgements, conclusions, and high priority recommendations, the study team gathered essential data and information by examining previous studies and current documents, records, and official reports and by interviewing key members of agencies and organizations pertinent to the study. Considerable emphasis was placed on learning the way of life of the native people through observation and hearing their expressions of needs and problems, particularly in the area of health services.

DOCUMENTS UTILIZED

The study team gathered and analysed essential documents, reports, and records of the following major types:

- . Socioeconomic studies pertaining to Indians.
- . Official population documents of the Dominion Bureau of Statistics and the Indian Affairs Branch.
- . Publications dealing with the vital statistics of Indians and non-Indians.
- . Annual reports of federal and provincial government and private agencies.
- . Indian band surveys.

INTERVIEWS CONDUCTED

Interviews were conducted with more than 80 key individuals involved or interested in Indian health services, including:

- . The Minister of National Health and Welfare and his staff.
- . The Deputy Minister of National Health.

- . The Director General of the Medical Services Branch.
- . Other members of the Medical Services Branch head office.
- . Leaders of national and provincial Indian brotherhoods and associations.
- . Officials in other federal offices and departments concerned with various aspects of government services and relations with Indians;
 - Department of National Health and Welfare
 - Department of Indian Affairs and Northern Development
 - Department of Regional Economic Expansion
 - Dominion Bureau of Statistics
- . Officials of all provincial health departments, with the exception of those in the Maritime Provinces.
- . Officials of four Medical Services Branch regional offices and seven zone or area offices.
- . Officials of five regional offices of the Indian Affairs Branch of the Department of Indian Affairs and Northern Development.
- . Representatives of three medical schools:
 - Queen's University
 - University of British Columbia
 - University of Toronto
- . Leaders of professional organizations, including:
 - Canadian Medical Association
 - Canadian Dental Association
 - Canadian Ophthalmological Society
 - Canadian Paediatric Society
 - Canadian Nurses Association
 - Canadian Public Health Association

In addition, more than 250 individuals were interviewed on field trips to 39 Middle North communities and eight southern reserves. These were generally individuals involved in providing services of various types to Indian people, as well as chiefs and band counselors. In addition to these interviews, it is estimated that, during visits to Indian communities, approximately 190 other native people were interviewed. The itineraries of the trips and the types of people interviewed are listed on the following page.

Itineraries

. Province of Alberta

- Wabasca
- Desmarais
- Chipewyan Lakes
- Fort Chipewyan
- John Dore
- Fort Vermilion
- High Level
- Habay
- Assumption

. Province of British Columbia

- Seabird Island*
- Chehalis*
- Musqueam*

. Province of Manitoba

- Norway House
- Cross Lake
- Garden Hill
- God's Lake Narrows
- St. Theresa Point
- The Pas
- Brochet
- Lynn Lake
- South Indian Lake
- Nelson House
- Thompson
- Wabowden
- Moose Lake
- Snow Lake
- Cranberry Portage
- Rousseau River*
- Long Plain Saulteaux*

. Province of Ontario

- Sioux Lookout
- Lac Seul
- Pikangikum
- Sandy Lake
- Pickle Lake
- Walpole Island*
- Chippewas of Sarnia*

* Southern reserve

- . Province of Quebec
 - Caughnawaga*
- . Province of Saskatchewan
 - Cumberland House
 - Pelican Narrows
 - La Ronge
 - Stanley Mission
 - Pine House
 - Uranium City
 - Fond du Lac
 - Black Lake
 - Stony Rapids
 - Loon Lake

Field Interviews Conducted with:

- . 18 physicians
- . 3 dentists
- . 26 federal nurses
- . 18 provincial nurses
- . 4 community health workers
- . 8 community aides or lay dispensers
- . 5 community development workers
- . 13 Indian chiefs
- . 54 Indian councilors
- . 13 Indian Affairs Branch agents and representatives
- . 28 principals or school teachers
- . 74 others, including community leaders and religious personnel
- . Approximately 190 other native people

APPENDIX B

Health Services in Indian Communities in the Middle North

CHIPWEYAN LAKE, ALBERTA - ACCEPTABLE HEALTH SERVICES EXIST

Chipewyan Lake is a village of approximately 100 registered Indians and 30 metis, and two white families. Health services are provided to the members of the village by a lay dispenser who is the wife of a missionary. Drugs are provided to her by the Medical Services Branch.

The provincial nurse from the Wabasca nursing station visits the community once a month for a half day. These visits are devoted primarily to treatment, immunizations, prenatal care, and sex education.

Physicians from Medical Services Branch have visited this village twice in the past four months. In August, an optometrist was to visit to test vision and to fit glasses. Visits by a dentist have been very infrequent. Each year, every resident has a chest film taken and processed by a visiting mobile unit of the tuberculosis survey.

The lay dispenser who provides drugs for simple complaints has radio communication with the forestry service at Stone Lake. Messages are relayed from there to the ranger station at Wabasca-Desmarais and the nurse there. Through this line of communication, nurses have always been available to Chipewyan Lake.

Patients are often evacuated by air to Camsell Hospital, although routine cases generally go to the hospital at Stone Lake.

FORT CHIPEWYAN, ALBERTA - ACCEPTABLE HEALTH SERVICES EXIST

Fort Chipewyan is a village of approximately 900 registered Indians, 200 metis, and 60 whites. The Medical Services Branch operates a two-bed nursing station at this location which is presently staffed by three registered nurses. Medical services, including treatment, prenatal and well baby clinics, and immunizations are provided to the total population from this station. Active school and home visitation programs are conducted to provide public health training for the members of the community. There is a general feeling of discontent among the Indians of this community regarding the services and attitudes of the federal nurses.

A general practitioner comes to the community from Fort Smith every two weeks. Visits by a dentist are infrequent, the last visit having been in June 1968. An ophthalmologist and an optometrist visited the village in November 1968, with no specific planned date of return. An annual survey for tuberculosis is conducted each year here.

The Indian and metis people of this community did not appear to assume responsibility for the maintenance of their own health. They are not involved in the provision of health services. Neither a community health worker nor a health committee exists.

Authorization for air evacuation of registered Indian patients is much easier to obtain than permission for air evacuation of metis. Most patients are evacuated to the hospital at Fort Smith.

Reliable telephone communication is accessible to approximately two-thirds of the population in the village.

FORT VERMILION, ALBERTA - ACCEPTABLE HEALTH SERVICES EXIST

Fort Vermilion is a community of approximately 640 registered Indians and 240 metis and whites. There is a 32-bed hospital in Fort Vermilion staffed by a physician, nurses, and laboratory personnel.

Indians appear to have equal access to the health facilities, although there has recently been a great deal of dissatisfaction among the Indians and metis regarding the physician. The previous physician in the community visited the Indians at home frequently, whereas the present physician sees most patients in the hospital or his office only during office hours except for emergencies.

All public health services and some treatment services are provided by a provincial public health nurse whose services are contracted for by the Department of National Health and Welfare. The nurse also visits Rocky Lane and Boyer River reserves one day a week to conduct a school health program, home visitation and patient screening, and health education and clinics.

The people of Fort Vermilion receive adequate eye care, since an optometrist lives in the community. The community receives adequate dental care, because a dentist visits the community about three times a year.

The Indian people are not involved in the provision of health services in Fort Vermilion. Neither a community health worker nor a health committee exists.

Communication via radio-telephone is adequate, with at least three transmitters available. Air evacuation is generally not necessary, because a physician and hospital are located in the community. When evacuation is required, both air and land transportation to Manning are adequate. Access for some people to the Fort Vermilion Hospital during freeze-up is limited because of separation from the hospital by a river.

HABAY-ASSUMPTION, ALBERTA - UNACCEPTABLE HEALTH SERVICES EXIST *

Habay and Assumption, two communities approximately five miles apart, utilize the same health resources at the Habay nursing station. Habay is a village of approximately 180 registered Indians who are slowly migrating, due to the flooding of the Hay River, to Assumption, where there are 600 registered Indians. The nursing station at Habay is currently unstaffed because of the recent departure of the second nurse to leave within a year. Tentative plans have been made to move the nursing station from Habay to Assumption in the future.

These two villages receive no regular physician visits, although a local physician from Rainbow Lake has visited the community sporadically. A dentist and an optometrist have visited the communities occasionally, but not regularly.

The Indian people are not involved in the provision of health services in these communities. There is no community health worker and a health committee does not exist.

Communication via radio-telephone and transportation via air or road are generally adequate.

* Since the time of this observation, a nurse has been employed and arrangements for more frequent physician visits from Rainbow Lake have been made.

JOHN DORE, ALBERTA - ACCEPTABLE HEALTH SERVICES EXIST

John Dore is an Indian village of approximately 200 registered Indians. A portable nursing station has been constructed, with a plan for the construction of a permanent station in 1970 or 1971. Currently, one of the two federal nurses staffing the Fox Lake nursing station visits this reserve once a week. The nurse provides primarily treatment services at the station, and has little time for public health training and home visitation.

The reserve does not receive regular physician visits. A dentist visited twice last year, once for a day and, on another occasion, for a week. An optometrist visited the reserve just a few months ago, although his previous visit was two years ago. The x-ray survey for tuberculosis visits the community annually.

An effort has been made to find a lay dispenser or community aide for the area, but this has been unsuccessful. Little interest for the provision of health services was evidenced during the visit to this reserve.

Radio-telephone communication with Fox Lake and the nurses there are often unsatisfactory because of ionospheric conditions. The airstrip, used primarily for air evacuations, often cannot be used because of inclement weather conditions. A poorly constructed road exists for land evacuation from John Dore to Fort Vermilion.

WABASCA-DESMARAIS, ALBERTA - ACCEPTABLE HEALTH SERVICES EXIST

Wabasca and Desmarais are two nearby communities with a total population of approximately 1,700 people. Desmarais is a village consisting mainly of Indians, while Wabasca is predominantly metis. There are no Medical Services Branch resources or personnel in either community. A provincial nursing station, staffed by two nurses, is located in Wabasca. One nurse serves Wabasca and outlying areas and the other serves Desmarais. In Desmarais, full-time nursing and midwifery services are also available at the St. Martin Hospital, operated by the Catholic mission. The people of Wabasca go to the provincial nurse for outpatient treatment, while those in Desmarais go to the clinic at St. Martin Hospital.

Visiting physicians from the Medical Services Branch conduct school health examinations of children and visit every three months to consult with the nurses on adult health problems. Physicians from Slave Lake and Camsell Hospital visit St. Martin Hospital regularly. An ophthalmologist and optician come in once a year to provide necessary eye care, concentrating on the children. Federal dentists visit the communities, usually once a year, but have not visited since October 1968.

There is little involvement by the Indian or metis people in the provision of health services to the villages. There is neither a community health worker nor a community aide.

There is radio communication to the nursing station at Wabasca through forestry service radio, though this closes down in the evenings and on weekends. Telephone communication in Desmarais is usually reliable.

Complicated medical cases are usually evacuated to Camsell Hospital, while less serious cases are referred to the hospital at Slave Lake. Inadequate land transportation from Wabasca to Desmarais often limits the accessibility to St. Martin Hospital.

BROCHET, MANITOBA - UNACCEPTABLE HEALTH SERVICES EXIST

Brochet, located about 80 miles from Lynn Lake, has a population of approximately 700 Indians. A three-trailer nursing station is being installed and will become operational sometime during summer 1969. At the present time, neither full-time nursing personnel nor a community health worker provide health services for the Indians. Drugs dispensing and emergency medical evacuation are provided by a priest who has had no medical training. The priest's paternalistic role in the community has retarded the progress of the Indians.

Depending on the weather, a federal nurse from Lynn Lake visits Brochet about once a month to provide several days of treatment to the Indians. Little emphasis is placed on health education in this community. Physician, dentist, and ophthalmologist or optometrist visits are very infrequent.

Little Indian involvement in the community's health services has been developed, and there is no community health worker, community aide, or health committee.

Medical evacuation can be accomplished only by air, and only when weather conditions permit. Poor communications with Lynn Lake are often encountered due to atmospheric conditions.

CROSS LAKE, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

Cross Lake is a village of approximately 1,100 people, consisting primarily of both treaty and nontreaty Indians. The Medical Services Branch nursing station located in the village is staffed by three registered nurses and a nursing assistant. Medical treatment services are provided to the total population from this nursing station, although some home visits are made. Most of the public health education is conducted by the native community health worker through home visitation.

This community receives only occasional physician visits from Norway House. Irregular and infrequent visits of dentists and optometrists or ophthalmologists have been made to the village during the last few years.

The Indian people generally are not involved in improving the health status of the community, and there is total reliance on the federal nurses to provide health services. The Indians here do not really understand the concept of health. This, in addition to the extremely poor environmental conditions, would suggest that there is a significant need for additional public health training.

Evacuation from Cross Lake is by air, approximately 45 air miles to the Norway House Hospital. Freeze-up and break-up periods are usually the only times when air evacuation is unavailable.

Communication via radio-telephone to Norway House is generally good, because of the close proximity of Norway House.

GARDEN HILL, MANITOBA - ACCEPTABLE HEALTH CONDITIONS EXIST

Garden Hill is a village of approximately 1,300 people, almost entirely registered Indians with only 30 whites. The community has a nursing station which is presently staffed by three federal nurses and one nursing assistant. Medical treatment services are provided to the entire population from this nursing station.

This community has not been receiving regular physician, dentist, ophthalmologist, or optometrist visits. A dentist has not visited the village in the last year.

Public health training is an important part of the health services provided for the Indians in this community. Regularly scheduled home visitation and school health programs are conducted by the native community health worker and one of the nurses.

Because the population is widely scattered, poor internal transportation and communication cause difficulty in getting to medical treatment when an emergency exists. Air evacuation to Norway House is generally adequate except during freeze-up and break-up periods.

Radio-telephone communications with Norway House are frequently disrupted by unfavourable ionospheric conditions.

GOD'S LAKE NARROWS, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

God's Lake Narrows is a village of approximately 900 people, primarily registered Indians. A small nursing station in the community is staffed by only one nurse and a nurse's aide. Most of the nurse's time is spent providing treatment services at the station, with very little time available for home visitation. Public health training is conducted by the community health worker, but with little supervision from the nurse. Few results of the health education program have been observed in the village, as it did not appear that the Indian people assumed responsibility for the maintenance of their own health.

The community has received only infrequent physician or dentist visits from Norway House, and an ophthalmologist has not visited the community during the last year.

Internal transportation of patients to the nursing station is generally inadequate because the houses are widely scattered along the water routes. External air evacuation to Norway House is generally adequate except for freeze-up and break-up periods.

Radio-telephone communication to Norway House is often unreliable because of ionospheric conditions.

MOOSE LAKE, MANITOBA - UNACCEPTABLE HEALTH SERVICES EXIST

Moose Lake is a village of 900 registered Indians located 35 miles east of The Pas by air. A nurse's aide with two months' training performs routine public health and first aid duties in the community. The aide has been able to bring about noticeable improvement of personal hygiene and basic public health practices. The aide, an employee of the Manitoba Health Department, works in a provincial health station with antiquated medical equipment and inadequate medical supplies. Patients requiring professional medical attention are sent to The Pas by air, when weather and lake conditions permit.

Physician visits are infrequent and cursory. A dentist usually visits the community twice a year, providing care primarily to children. There has been no visit by an ophthalmologist or an optometrist in nearly two years.

Communication to The Pas is available only eight hours a day, five days a week for medical emergencies. Air evacuation depends on weather and lake conditions, because there is no all weather-landing airstrip.

NELSON HOUSE, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

Nelson House is a community of approximately 800 Indians located approximately 45 miles west of Thompson. Although Thompson is the nearest city with major medical resources, most patients are evacuated to The Pas. Two nurses at the Medical Services Branch nursing station provide primarily treatment services to the Indians of the community. An active community health worker visits homes to provide public health education. Noticeable progress has been made in health education.

Visits to Nelson House by physicians, dentists, and ophthalmologists or optometrists are generally unannounced and infrequent. Communications with The Pas are often poor, because of ionospheric conditions. Since no all-weather landing strip is available near the community, evacuation is restricted to times of acceptable weather and lake conditions.

NORWAY HOUSE, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

Norway House has a population of approximately 2,700 people - 1,400 Indians, 1,700 metis, and 600 whites. A 40-bed federal hospital and a public health clinic are located in the community. The hospital facility provides medical care to approximately 10,000 people in Norway House and surrounding communities within a 100-mile radius.

The hospital is staffed with only two full-time physicians, who primarily handle emergency visits to the hospital. The nursing staff consists of nine registered nurses and sixteen nurse's aides. The public health clinic is staffed by one nurse and two community health workers. The health facilities and staffing level appear sufficient to serve the Norway House community, but are inadequate to serve the population of all surrounding communities.

Indians and metis have recently been placed on the hospital advisory committee to involve the native people with the problem of health care in their communities.

Since Norway House is an isolated community, complicated cases are generally evacuated by air to Winnipeg. Although an airstrip exists, it cannot be used in all weather. Except for freeze-up and break-up, adequate and reliable air transportation is available between Norway House, the surrounding nursing stations, and Winnipeg.

Radio-telephone communication between Norway House and the nursing stations and Winnipeg is often interrupted for several days because of ionospheric interference.

THE PAS, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

The Pas, a town of 5,000, has an Indian population of approximately 400. Health services for Indians are provided by a group of physicians in the town either at their clinic or the St. Anthony Hospital. A federal public health nurse and community health worker make regular home visits on the reserve. Dental care is provided by a dentist practising in The Pas. An optometrist in The Pas provides routine eye care for Indians.

Indian interest and involvement in the health problems of the community have increased, following a number of demonstrations against poor health services.

Transportation and communications are generally adequate to meet the needs of the Indians. Boarding facilities for Indians waiting to enter the hospital or be evacuated home are inadequate and do not meet minimum provincial standards.

SOUTH INDIAN LAKE, MANITOBA - UNACCEPTABLE HEALTH SERVICES EXIST AT PRESENT TIME

South Indian Lake, located about 90 miles east of Lynn Lake, has a population of about 450 registered Indians and 325 metis. This community may be flooded within five years because of the Manitoba Hydro Project. The present overnight cabin and clinic is being replaced this year by a three-trailer nursing station. The federal nurse based at Lynn Lake currently visits South Indian Lake once a month for a few days. A minister in the community dispenses drugs and arranges for medical evacuation for emergency cases. Emergency care is sometimes provided by one of the teachers, who is a registered nurse.

There is little Indian involvement in the community's health programs. The teacher who is also a nurse provides the only health education in the community, primarily through her classes. The infrequency of physician, dentist, and ophthalmologist or optometrist visits causes serious gaps in routine health service. Medical evacuation and radio-telephone communication to The Pas or Lynn Lake are often inadequate because of poor weather and ionospheric conditions.

ST. THERESA POINT, MANITOBA - ACCEPTABLE HEALTH SERVICES EXIST

St. Theresa Point is a village of approximately 800 people, primarily registered Indians. The Medical Services Branch operates a nursing station which is currently staffed by two registered nurses. Treatment is provided to most of the population from the nursing station, although the nurses visit a nearby community once a week and provide medical services in the basement of an old church.

The village is visited approximately every six months by a provincial physician, usually a paediatrician. A provincial ophthalmologist usually visits the village annually. Federal physicians also visit St. Theresa Point periodically. However, it has not been visited by a dentist in more than a year.

An active public health program consisting of visits by the nurse and community health worker to the school and to homes has made noticeable improvement in health status of the Indians in this community.

Evacuation from St. Theresa Point is by air to Norway House, approximately 130 miles to the east. Unfavourable weather and lake conditions limit such air evacuation.

Communication from St. Theresa Point by radio-telephone is apparently disrupted by unfavourable ionospheric and weather conditions.

LAC SEUL, ONTARIO - ACCEPTABLE HEALTH SERVICES EXIST

Lac Seul is a community of approximately 250 registered Indians located 25 air miles northwest of Sioux Lookout. Hospital, medical, and dental care is obtained at the Indian hospital in Sioux Lookout. The nurse from the Sioux Lookout health centre visits the community at least once a month. A community aide has recently been trained and placed in the community.

Visits to the community by medical and dental personnel have been infrequent, but it is anticipated that this situation will be improved considerably as the University of Toronto agreement is fully implemented.

Access to the community is by air, and medical evacuations are limited by weather conditions. An all-weather airstrip does not exist. Ionospheric conditions occasionally interfere with communications to Sioux Lookout.

PICKLE LAKE AND NEW OSNABURG, ONTARIO - UNACCEPTABLE HEALTH SERVICES EXIST
AT THE PRESENT TIME

Pickle Lake is a former mining town in which approximately 50 registered Indians remain in residence. Most of the Indians have settled in New Osnaburg, a community of approximately 450 people located 25 miles to the south by road. These communities are approximately 120 air miles northeast of Sioux Lookout.

The only health facility presently in the area is a health centre in Pickle Lake. This was adequate when a mining hospital and physicians were present in the community. The health centre is staffed by one nurse who is responsible for four communities in addition to Pickle Lake and New Osnaburg. One of these is of similar size to New Osnaburg and a nursing station is being located there.

A nursing station which will be staffed by two nurses is being installed in New Osnaburg. This, together with the implementation of the University of Toronto agreement, should bring health services in the area to an acceptable level.

There is access to the community by road, but distance and road conditions make air evacuation the most practical alternative. Telephone communication is generally excellent.

PIKANGIKUM, ONTARIO - ACCEPTABLE HEALTH SERVICES EXIST

Pikangikum, a community of approximately 450 registered Indians, is located 150 air miles to the northwest of Sioux Lookout. The community has a nursing station which is staffed by a registered nurse with midwifery training, and a nursing assistant. The facility is well equipped. Hospital care is generally received in Sioux Lookout. Visits to the community by physicians, ophthalmologists or optometrists, and dentists have been infrequent, but will improve with implementation of the University of Toronto agreement.

Health education has received little emphasis and the people in the community generally exhibit little understanding of the meaning of health and the importance of good health practices.

Communication is by radio-telephone and blackouts due to ionospheric conditions are reported to be infrequent. Medical evacuations must be accomplished by air, weather conditions permitting. There is no airstrip in the community.

SANDY LAKE, ONTARIO - ACCEPTABLE HEALTH SERVICES EXIST

Sandy Lake is a community of approximately 950 registered Indians located 210 miles north of Sioux Lookout. The nursing station is staffed by two registered nurses who provide the community with primary medical care. Hospital services are generally obtained in Sioux Lookout. The settlement also has the services of a community health worker. The level of community involvement and interest in health services is relatively high. Visits to the community by medical and dental personnel have been infrequent, but will improve with implementation of the University of Toronto agreement.

Medical evacuation is by air, weather permitting. An airstrip is under construction. Communication is by telephone, but calls cannot be made to points outside the community after 8 p.m. because the relay station in Kenora does not monitor calls after this time.

BLACK LAKE, SASKATCHEWAN - UNACCEPTABLE HEALTH SERVICES EXIST

Black Lake is a village of approximately 450 people - approximately 400 registered Indians and 50 metis and whites. The community has a health station. Until recently, a Medical Services Branch public health nurse from Stony Rapids visited this community twice a month. The community is not receiving these visits at present as the nursing position at Stony Rapids is vacant. A provincial public health nurse, also stationed at Stony Rapids, has occasionally held public health clinics at Black Lake during the absence of the federal nurse.

A doctor from Uranium City, approximately 100 air miles to the west, visits Black Lake once a month and stays for four or five hours. The community does not receive visits from an ophthalmologist or optometrist, and a dentist comes only rarely.

The community does not have a health committee, a community health worker, or a lay dispenser. The Indians in this community, as in most visited, did not understand the concept of health. In particular, they did not grasp the concept of public health and as a result they expressed uncertainty over whether or not they wanted a community health worker, as they basically considered her a "half trained" treatment nurse.

Evacuation from Black Lake is either by road to the nursing station at Stony Rapids, 17 miles away, or by air to Uranium City. A land airstrip does not exist at Black Lake, so air evacuation by fixed wing aircraft is often prevented by unfavourable lake conditions. The road between Black Lake and Stony Rapids is of low quality and is sometimes impassable.

Communication in Black Lake is by radio-telephone and is generally not adequate to meet the emergency health needs of the population.

It is of interest to note that at Black Lake the local school teacher had instituted a program to develop personal hygiene habits among the Indian children. As part of the program, the children were taking showers while at school. The program appears to have been relatively successful.

CUMBERLAND HOUSE, SASKATCHEWAN - ACCEPTABLE HEALTH SERVICES EXIST

Cumberland House is a village of approximately 1,000 people - approximately 800 metis, 150 registered Indians, and 50 whites. A new nursing station recently was constructed by the Province of Saskatchewan at Cumberland House. This station is modern and well equipped and contains four beds plus a nursery. It is staffed by one full-time provincial nurse who concentrates on treatment service. Medical services are provided to the total population from this provincial nursing station.

The community receives regular weekly physician visits from a group of doctors in the town of Nipawin, approximately 100 miles to the southwest. Regular dental service is also provided for the community, but the inhabitants are not satisfied with the dental service, primarily because of a personality conflict with the dentist providing the service. Visits to the community by ophthalmologists or optometrists were very infrequent. Little emphasis has been placed on public health teaching in the community.

Indian involvement in the provision of health services is basically nonexistent. Neither a community health worker nor a health committee is present. The registered Indians in this settlement, as in most, have only a very limited idea of what is meant by the concept of health.

Evacuation from Cumberland House is by road to the hospital at Nipawin. The road has only been built in the last few years and is of low quality. Evacuation by air is possible at most times, as a relatively good landing strip exists.

Communication out of Cumberland House is by radio-telephone. Both the Province of Saskatchewan's Department of Natural Resources and the RCMP have facilities. The Department of Natural Resources facility is available only from 9 to 5, Monday through Friday.

FOND DU LAC, SASKATCHEWAN - UNACCEPTABLE HEALTH SERVICES EXIST

Fond du Lac is a village of approximately 350 registered Indians, 50 metis, and 50 whites. This community has no official health facility.

A doctor from Uranium City, 60 air miles to the west, visits Fond du Lac once a month, and stays for four or five hours. In this short time, the doctor apparently sees 30 to 50 patients. The community has been receiving visits from a dentist once a year for five days. Until recently, a Medical Services Branch public health nurse from the Stony Rapids nursing station, 50 air miles to the east, visited this community approximately once a month. The community is not receiving these visits at present, as the nursing position at Stony Rapids is vacant. The community does not receive visits from either an optometrist or an ophthalmologist and people requiring eye care or glasses generally go to Edmonton, Alberta.

Native involvement in the provision of health services is basically nonexistent; the community does not have a community health worker or a health committee. The community does have a lay dispenser but this is the local school principal and not an Indian. He has not received any formal basic training on the dispensing of medicine. The lay dispenser does have ready access to a radio telephone connecting him with the doctors at Uranium City. It would appear that native involvement and development in this community is hindered by the paternalistic attitudes of many of the influential whites in the community.

Communication is via radio-telephone operated by the Department of Natural Resources. This facility is officially open only from 9 to 5, Monday through Friday.

Evacuation from Fond du Lac is by air to Uranium City. Although a land airstrip exists, it is not an all-weather strip. Consequently, it is not always possible to evacuate a patient by a fixed wing aircraft.

LA RONGE, SASKATCHEWAN - ACCEPTABLE HEALTH SERVICES EXIST

La Ronge is a town of approximately 2,500 people - approximately 950 registered Indians, 350 metis, and 1,300 whites. There is a modern, 27-bed community hospital in La Ronge, which is staffed by 2 doctors and approximately 10 registered nurses and 8 nursing assistants. In addition, a federal public health nurse located at La Ronge directs a public health program for registered Indians in the town and surrounding Indian communities. The Indian people appear to have equal access to the health facilities that exist.

For the services provided by ophthalmologists, optometrists, and dentists, the population of La Ronge generally has to go to Prince Albert, which is approximately 150 miles to the south by road.

The community health worker who is making regular home visits has been successful, but progress has been slow especially among Indian families living in the poorest conditions.

Communication and transportation facilities within the community are good and do not limit access to the health facilities.

It was noted that, at La Ronge, 75% to 85% of the hospital care provided to Indians was for children under the age of 2. Further, it was noted that most illness among Indians was related to poor environmental conditions.

LOON LAKE, SASKATCHEWAN - ACCEPTABLE MEDICAL SERVICES EXIST

Loon Lake is a village of approximately 350 registered Indians, 150 metis, and 500 whites. A community hospital with 12 beds and 4 to 6 cribs is located at Loon Lake. The hospital is staffed with 2 doctors and approximately 6 nurses and 5 nursing assistants. Indians appear to have equal access to the doctors and the hospital facility.

The community does not receive regular visits from ophthalmologists and optometrists. A dentist does visit the community regularly. A public health nurse visits the community approximately once every three weeks and holds public health clinics.

There is no health committee in the Indian community and, although environmental conditions are quite poor, there is no community health worker.

Transportation and communication facilities within the community of Loon Lake are good, and do not limit the access to the medical resources.

The Indian community at Loon Lake has been provided with a communal washing facility. The Indian people did not appear to make much use of this facility. In addition, the washing facility appeared to have been abused from time to time. Observations and discussions with the Indian people indicated that washing facilities can be a very beneficial addition to the community if they are provided in sufficient number and in the proper locations. Indian involvement in the construction and maintenance of such facilities appears essential.

PELICAN NARROWS, SASKATCHEWAN - ACCEPTABLE HEALTH SERVICES EXIST

Pelican Narrows is a village of approximately 900 people - consisting of approximately 120 registered Indians, 100 metis, and 80 whites. The Medical Services Branch operates a 4-bed nursing station at this location. The nursing station is a relatively well equipped facility and is presently staffed by one nurse with midwifery training and one nursing assistant. Medical services are provided to the total population from this nursing station.

The community has not been receiving regular physician, ophthalmologist or optometrist visits, but visits by a dentist have been made regularly. Little emphasis has been placed on public health teaching in the community and little time is devoted to home visiting for public health purposes.

Pelican Narrows did not have a community health worker at the time of the visit, but steps were being taken to obtain one. A health committee did not exist in this community. Although the Indian community was reasonably progressive, the Indian people did not appear to assume responsibility for the maintenance of their own health.

Evacuation from Pelican Narrows is by road to Flin Flon, Manitoba, approximately 80 miles to the east, where there is a hospital and a clinic of 10 doctors. Evacuation by road has only been possible for the last several years, as the road has only been recently built. The nurse at this location appeared to refer a high percentage of the patients she sees to the doctor at Flin Flon. Evacuation by air is limited basically to favourable weather and lake conditions, as the land airstrip is of low quality.

Communications out of Pelican Narrows are by radio-telephone. A radio is located at the nursing station, as well as the Department of Natural Resources and the RCMP. Communications out of Pelican Narrows are apparently disrupted occasionally by unfavourable ionospheric conditions.

STANLEY MISSION, SASKATCHEWAN - UNACCEPTABLE HEALTH SERVICES EXIST

Stanley Mission is a village of approximately 825 people - approximately 700 registered Indians, 75 metis, and 50 whites. The community has a health station. The public health nurse visits Stanley Mission approximately once a month for several days and conducts clinics out of the health station. The nurse also does some home visiting. Although she is only supposed to provide public health services, she often provides treatment services, out of necessity. It was noted that many Indians attend the clinics only when they are sick.

The community does not receive physician, ophthalmologist, or optometrist visits. A dentist usually visits the community twice a year, concentrating on providing dental care to the children. The incidence of dental cases appeared to be significant among the adult population.

Stanley Mission had no community health worker at the time of the visit. A female band councillor who was also the lay dispenser for the community, occasionally assisted the public health nurse in the capacity of a community health worker. There appeared to be little other Indian involvement in the provision of health services in this community.

Evacuation from Stanley Mission is by air to La Ronge, approximately 35 air miles to the southwest. Although a land airstrip exists, it cannot be used in all weather.

Communication to La Ronge is via radio-telephone operated by the Department of Natural Resources. This facility is officially open only from 9 to 5, Monday through Friday.

Again, in this community it was observed that the Indians did not really understand the concept of health. In addition, they did not assume any real responsibility for maintaining their own health. This, in addition to the generally poor environmental conditions, would suggest that there is a need for a significantly increased public health training.

STONY RAPIDS, SASKATCHEWAN - ACCEPTABLE HEALTH SERVICES EXIST

Stony Rapids is a village of approximately 300 metis, 40 registered Indians, and 60 whites. The community has a nursing station with 4 beds plus nursery. It is a combination federal-provincial facility, as the federal government has recently built an addition to the existing provincial nursing station to house a federal public health nurse. The nursing station is presently staffed by one provincial public health nurse and the federal nursing position is vacant.

The community is visited approximately once a month by a doctor from Uranium City, 90 air miles to the west. The community does not receive visits from ophthalmologists or optometrists and visits by dentists are infrequent.

The community does not have a health committee or a community health worker.

Communication is by radio-telephone and it is not always adequate to meet the emergency health needs of the population.

Evacuation is by air to Uranium City. A reasonably good land airstrip exists, so evacuation by fixed wing aircraft is possible at most times.

URANIUM CITY, SASKATCHEWAN - ACCEPTABLE HEALTH SERVICES EXIST

Uranium City is a town of approximately 2,250 whites, 300 metis, and 150 registered Indians. A modern 35-bed hospital is staffed by 2 doctors and approximately 10 nurses and 11 nursing assistants. Although the Indian population is not integrated into the community, the Indian people appear to have equal access to the health facilities.

Uranium City receives occasional visits by optometrists but not by ophthalmologists. Generally, the population goes to Edmonton, Alberta for glasses or eye care. The community receives adequate dental care, as a dentist visits the community for ten days a month, each month.

The Indian people are not involved in provision of health services in Uranium City, as neither a community health worker nor a health committee exists.

Communications and transportation and services within the community are good and do not limit access to the health facilities.

The doctors in Uranium City noted that there appeared to be a high incidence of psychosomatic illness among the Indians in and around Uranium City.